OCT 11 1909

The American Artisan
And Hardware Record

58. No. 15. CHICAGO, OCTOBER 9, 1909. $2.00 Per Year.

TURN BUCKLES

A full line of Bolts, Bolt Ends, Rivets, Lag Screws, Nuts, Washers and Carriage Hardware.

COLUMBUS BOLT WORKS,
COLUMBUS, OHIO.

"American Seal" Roof Paint

lengthens the life of a roof.

¶ A coating of it protects a house top from the severest kind of weather.

¶ It makes an old roof as good as new and a new roof doubly permanent.

¶ This paint MUST be made right to stand the severe tests it must undergo and we HAVE made it right.

¶ "American Seal" is made in six standard colors. Either metallic or graphite.

Write for prices to-day.

The WM. CONNORS PAINT MFG. COMPANY
Makers, TROY, N. Y.

Western Agts.: Friedley-Voshardt Co. 761 Mather St., Chicago, Ill. Southwestern Agts.: Stockhoff Supply Co. 107 N. Main St., St. Louis, Mo.

Do you want enough samples of
THE IWAN PERFECTION WIRE CONDUCTOR PIPE HANGERS
for a small job of spout-hanging?

It is only by getting enough samples to complete a job that you can realize the advantage of these hangers over other methods of attaching spouting.

For 20 cents, either silver or stamps, we will send you a box of 15 Perfection Hangers, either 2½ inch or 3 inch, by mail postpaid. This is considerable less than cost to us, as the postage alone is about 15 cents.

If you find that you can use them in your tinning work we can supply you direct, or will send you the addresses of the nearest jobbers handling them. Don't fail to send for the samples if you have never tried them.

IWAN BROTHERS, Mfrs.
South Bend, Ind.

"To discontinue an advertisement," says Ex-postmaster-General John Wanamaker, one of the largest advertisers in the world,—and, naturally enough, one of the most successful business men,—"is like taking down your sign. If you want to do business you must let the people know it. I would as soon think of doing business without clerks as without advertising."

"NEVER-BREAK"
TRADE MARK

CATALOG FREE

"NEVER-BREAK"
STEEL SPIDERS
GRIDDLES and KETTLES
WILL NOT
Scale Off like cheap enamel.
WILL NOT
Scorch or Burn like light fry pans and skillets.
WILL NOT
Absorb Grease or Flavors like cast iron.

THE AVERY STAMPING CO.
CLEVELAND, OHIO
Sole Manufacturers "NEVER-BREAK" Goods

DEALERS! Here is a sample of our Farm Advertising

Handle ours and you will be on the right side. The farmer knows about them. We have a branch at Kansas City and can ship on short notice.

"THE DENNING" CORN CRIBS AND GRAIN BINS

Will store your whole crop at a nominal cost.

"THE DENNING" FENCE
Will take care of your poultry, hogs and stock.

"THE DENNING" LAWN FENCE
Will ornament your premises.
Ask your dealer for "The Denning" Take no substitute.

THE DENNING WIRE & FENCE CO. **CEDAR RAPIDS, IOWA**

Since 1895
when the first
MATCHLESS Spring Hinge
was placed on the market, not one set has required repairs from fault of hinges.

All **Matchless** Spring and Pivot Hinges, Floor and Jamb Hinges and Hardware Specialties are made up to the same high standard.

If your jobber cannot furnish them, write us

LAWSON MFG. CO.
40 Dearborn St., Chicago, Ill.

"Don't aim to be an earthly saint with eyes fixed on a star,
Just aim to be the feller that your mother thinks you are."

We show here representatives of our

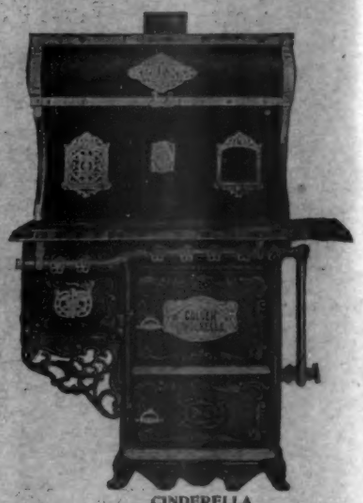
THREE LINES OF NATURAL GAS RANGES

The application of our long experience in burning natural gas, together with the weight and liberal size of our Gas Ranges, makes them

ALL A DEALER HOPES THEY ARE.

GOOD LUCK

TREMONT



CINDERELLA

We have had a long and extensive experience in the manufacture of Natural Gas Ranges—in fact longer than any competitor. Our facilities and location are the best—thus placing us in a position to offer that perfection in quality which can not be obtained elsewhere.

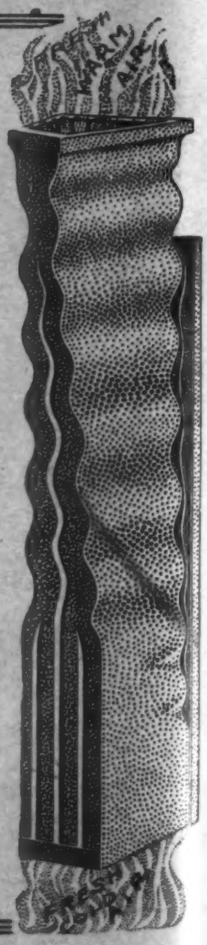
WE ALSO OFFER ADVANTAGES IN PRICE AND SIZE.

STOVE & RANGE CO. OF PITTSBURGH, Pittsburgh, Pa.

GOOD VALUES IN STOVES.

The World's Largest Makers of Natural Gas Ranges.

THE KELSEY
WARM AIR GENERATOR
ZIG-ZAG HEAT TUBES



To the great BATTERY OF ZIG-ZAG HEAT TUBES is due the wonderful efficiency, power and economy of the Kelsey Warm Air Generator.

The Kelsey warms air by the best method by passing in separate currents up through the heat tubes.

The Heat Tubes surround, are in direct contact with and overhang the fire, and are heated on all sides by conduction, by radiation and by the burning gases which pass down around the backs of the tubes.

Each Heat Tube has 8 Square Feet of Heating Surface and Each Generator, According to Its Size, Has From 8 to 16 Heat Tubes.

Great volumes of fresh air are properly warmed and carried to the top of the Generator and are FORCED INTO EVERY ROOM.

KELSEY FRESH AIR HEATING is preferred by people who investigate, to the warmed over air of steam and hot water radiator systems, AND ANY DEALER can convince any prospective purchaser that KELSEY HEATING IS THE ONE RIGHT WAY—the easiest, most practical, sanitary and economical way—to heat any house, church or school.

35,000 SOLD—700 IN CHURCHES AND SCHOOLS

SEND FOR BOOKLET AND AGENCY PROPOSITION

KELSEY HEATING COMPANY, - Syracuse, N. Y.

NEW YORK OFFICE: 156 Fifth Avenue

CHICAGO: Van Evera & Lewis Mfg. Co. 104-106 W. Lake St.

We Have a Large Stock of these Base Burners, and Can Ship the Day Your Order is Received.

FRONT VIEW

SIDE VIEW

THE FOX IDEAL BASE BURNERS

Smooth Design, Lift off Nickel; Five Flue Construction; Extra Heavy Fire Pots; Large Magazine; Ash Pan; Elegant Urn; Modern Grate; Automatic Magazine Cover; Best No. 1 Mica.

Heaviest and Best Fitted Base Burner Made

No.	Fire Pot	Weight
140	14 inch	450 lbs.
160	16 "	500 "

Write for our Prices.

The Fox Furnace Company, Elyria, O.

Western Distributors: Day K. Smith & Co., Kansas City, Mo.
Michigan Agents: The Wormnest Stove & Range Co., Grand Rapids, Mich.

THE FOSTER LINE

Made in Sizes
7 & 8-16, 8 & 9-18,
8 & 9-20 square
8 & 9-18 and 8 & 9-20
with reservoir

Duplex Grates, Large Sliding Hearth Plates and Lift Out Ash Pan.

No Trouble to Clean.

Always Looks Neat.

All Sizes Have Cut-Tops, Cut Long Center

Foster's Flyer

Another Original and Handsome Coal Cook Addition to

"THE FOSTER LINE"

Inspect it carefully, it is well worth your time. We have recently added

FOSTER'S AGENT	FOSTER'S REGAL	FOSTER'S DELIGHT
FOSTER'S OPAL	FOSTER'S CROWN	FOSTER'S TROPIC

and will be pleased to mail you cuts and descriptive matter. We now present **Foster's Flyer** which we have just brought out and will soon offer **Foster's Acme** and **Foster's Victor.**

Watch for them. Secure the agency for the most complete, original and up-to-date line of new patterns on the market.

The Foster Stove Co.

Ironton, Ohio and Kansas City, Missouri

Makers of

THE FOSTER LINE

RADIANT HOME SPECIALTIES

A NEW RADIANT HOME BASE BURNER

THREE SIZES, Nos. 91, 92 and 93.

FLUES. Four diving Flues, one in each corner of stove; thus distributing the heat equally to all points of radiating surface, uniting in the big base flue, powerfully and evenly heating the entire base, making a strong floor heater; then up the big back flue to the tea kettle attachment and smoke collar. Flue stop in convenient position.

ASH PIT. Large and roomy, with a large bailed ash pan. Ash chest so constructed as to guide all ashes into ash pan.

GRATES. Full duplex, which have proved to be the most desirable of all forms of grates. Removed through the upper front mica doors, making a quick and easy replacement. This form of grate has been the most highly developed in Radiant Homes.

FIRE POT. Heavy and scientifically constructed, with a liberal allowance for expansion. Oval in shape, producing an extra large fire surface, which, in conjunction with the four flues, gave this stove its phenomenal success. Removable through upper front mica door.

MAGAZINE. Oval in shape to conform with fire pot. Removable through upper front mica door. Large storage capacity, and equipped with an automatic magazine cover, closely fitted, insuring against gas explosions or ignition of coal in magazine.

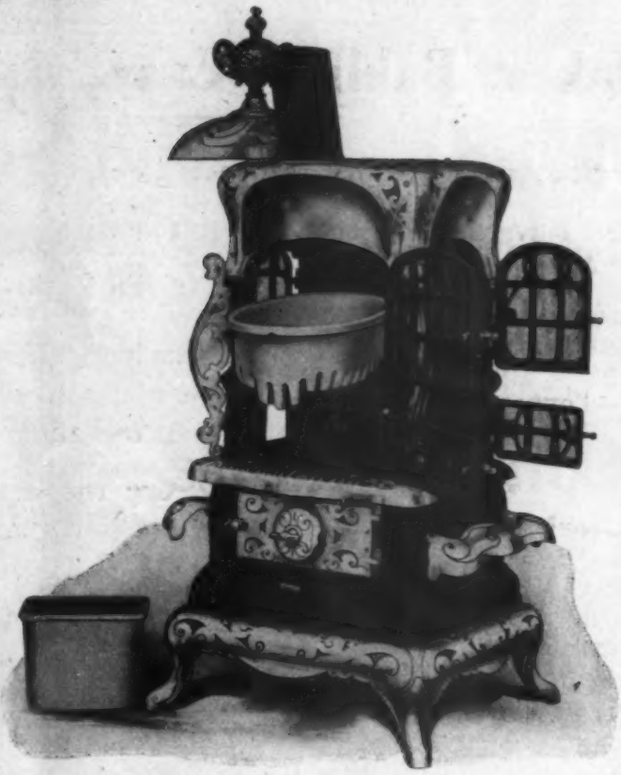
RADIATION. The stove being oblong in general shape with a large base flue, the upright lines being perpendicular, showing no contraction, and in addition, having a large ascending flue outside the general form of stove, produces an amount of radiating surface greatly in excess of what the first impression of stove would indicate.

NICKEL. Of smoothest finish and excellent color, of a heavy deposit and carefully ventilated. is composed of the following parts:

LEGS
SKIRTS
WINGS
FOOT RAILS
NAME PLATE
ASH PIT DOOR
JACKET
SWING TOP
URN BASE
KNOBS AND BOLTS
TURN KEYS
GOLD URN

POCKET JOINT. This joint as incorporated in the Radiant Home, and the special cement, made by ourselves, creates an air tight joint from which the cement cannot fall out.

ILLUMINATION. The largest practical mica illumination frames and mica holders, carefully fitted, with best grade of mica furnished.



Manufactured exclusively by:

GERMER STOVE COMPANY

LARGEST MANUFACTURERS OF STRICTLY HIGH GRADE STOVES, RANGES AND FURNACES

WESTERN BRANCH:
231-247 Newberry Ave., CHICAGO, Ill.

ERIE, PA.

Get the Profit These Advertisements Will Bring You!

These half page advertisements of the CONTROL RANGE will run during the coming Fall in the best magazines in the country for reaching the women who cook the nation's food. They will bring inquiries to you; they will bring SALES to you—and liberal profits.

Give us your co-operation, and we will give you written authority to announce the most startling, trade-compelling guarantee ever given with a stove. You may give this guarantee at our risk. The profits it brings are yours.

Write us for full details.

ALBANY FOUNDRY CO.

Van Renslear Island, Albany, N. Y.

Makes Baking Easy

You know what it means to try to bake in an oven that heats by fits and starts—that only gets hot in spots. Then think of the CONTROL Range that will heat up ***hot*** in 10 minutes; that will give a steady, even baking heat for hours without touching the fire; and, best of all, that is guaranteed to save 60% of your fuel expense. The

Control Range

is built on a new principle. No front or side drafts. Instead, a regulating lever that operates a draft device beneath the oven; that will regulate your fire as you regulate your watch.

Ask your dealer about the CONTROL Range, or write us and we will send you a catalogue. Select your range, and we will ship it to you prepaid, and give you 90 days' free trial. Use as directed, and we guarantee it to save 60% of your fuel bill with coke, or 33% if you burn coal. Unless all our claims are true, return the range at our expense.

SPECIAL DRAFT DEVICE SAVES MORE THAN HALF YOUR FUEL

ALBANY FOUNDRY CO.,

Van Renslear Island, Albany, N. Y.

The Best SELLING OAK STOVE ON THE MARKET

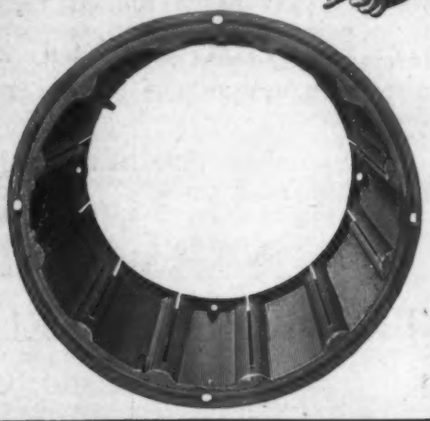
¶ The splendid appearance, variety of selling points and general all 'round excellence of

THE OAK RUBY

have made it the surest and best selling Oak stove ever made.

¶ It burns hard coal, soft coal or wood. The magazine is large. The nickel trimmings are beautiful—and there's lots of nickel.

¶ Note the cut of the fire-pot with which the **OAK RUBY** is fitted.

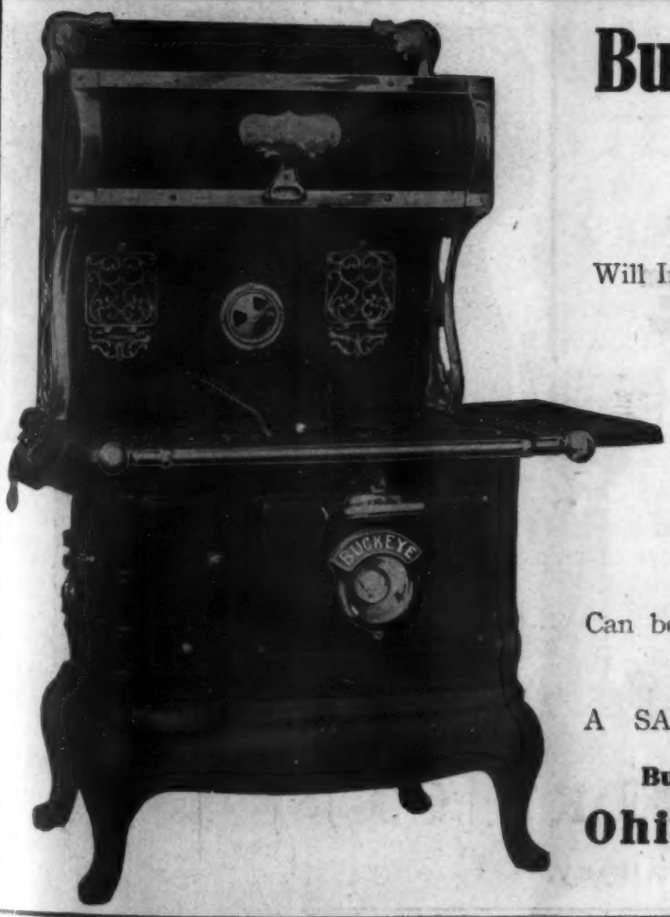


¶ This is a heavy slotted gas and smoke consuming fire-pot and only one of the valuable and distinctive features of this dandy heater.

You will do well to investigate this Stove at once Inquiries are solicited

SOUTH ERIE IRON WORKS, Mfrs., ERIE, PA.

Light Gray Iron Castings a Specialty.



Buckeye All Cast Range

Here is Your Opportunity
To Sell a BETTER Range
At a BETTER Profit

Will Increase Your Sales
Satisfy Your Customers
Give You Larger Profits
None Better Made

The Oven
Square
Roomy
Perfect Baker

Can be supplied with "L" Water Front.

Made Also With Reservoir

A SAMPLE WILL CONVINCE YOU

Builders of the Buckeye Line

Ohio Stove Company

Portsmouth, Ohio

BORN'S Air Blast Heaters

We want the trade to get better acquainted with these stoves. They really have unusual merit and are worth investigating. When dealers know Born's Heaters as well as they do Born's Ranges, we believe there will be more profit in the stove business for all concerned.

Do these advantages appeal to you?

Extra deep air-cell fire pot; hot blast ring connecting with the top of each air cell and thus producing combustion which consumes gases and smoke which would otherwise be wasted; extra large ash pit, dust tight, with ash pan 4½" deep; wide deflector ring for forcing heat down to floor; heavy well fitted castings; attractive design and finish; seven sizes, 12" to 21" fire pots.

Also a line of Oaks with corrugated fire pots and removable magazines.

Let us send you catalogue and order-getting prices.

	Diam. of Fire Pot	Depth of Fire Pot	Weight Complete
No. 112	12"	9¼"	199 lbs.
No. 114	14"	10 "	217 lbs.
No. 116	16"	10 "	260 lbs.
No. 118	18"	10¾"	301 lbs.
No. 121	21"	11½"	368 lbs.

THE BORN STEEL RANGE CO.

Cleveland, Ohio

VAN'S

Patent Improved
Wrought Steel Portable

RANGE

For Hotels, Restaurants, Public Institutions, Boarding Houses and Private Families. All kinds of Hotel Implements for culinary purposes. Manufactured and for sale by

The

JOHN VAN RANGE CO.

Southwest Corner
5th and Broadway

CINCINNATI, - OHIO

Shows Cole's Hot Blast burning the gas half of soft coal.
We have 1,000,000 in use sold on the above guarantee.

THE GREAT FUEL SAVER
THE QUICK SELLER
THE GREAT MONEY MAKER
AND TRADE BUILDER

COLE'S ORIGINAL HOT-BLAST

Sold on a guarantee that cannot be made on any other heating stove manufactured.
Our guarantee to every purchaser of a Cole's Original Hot Blast is:—

"1—A saving of one-third in fuel over any lower draft stove of the same size, with soft coal, slack or lignite.
"2—That Cole's Hot Blast will use less hard coal for heating a given space than any base burner made with the same size fire pot.
"3—That the rooms can be heated from one to two hours each morning with the soft coal or hard coal put in the stove the evening before.
"4—That the stove will hold fire with soft coal from Saturday night until Monday morning.
"5—A uniform heat day and night with soft coal, hard coal or lignite.
"6—That every stove will remain absolutely air-tight as long as used.
"7—That the feed-door is and will remain smoke and dust-proof.
"All we ask is that the stove shall be operated according to directions and set up with a good flue.

"(Signed) COLE MANUFACTURING CO.,"
(Makers of the Original Patented Hot Blast Stove.)

CONFIDENTIAL TO STOVE DEALERS.

You can't make any money in the stove business by selling competition stoves. The man who stands by the good stove and range specialties having genuine merit and who confines himself to selling such specialties for which he is exclusive agent in his town always has in the past and will in the future make the big money in the retail stove business.

Write for catalogue showing our money making line of patented stove and range specialties

COLE'S Original Patented Hot Blast Heaters.
COLE'S Original Patented Air Tight Wood Heaters.
COLE'S Patented Hot Blast Ranges.
COLE'S Patented Hot Blast Hi-Oven Ranges.
COLE'S Patented Radiant Magazine Hard Coal Heaters.

Sold only to one dealer in each town. Write for catalogue and terms if there is no agent in your town.

COLE MANUFACTURING CO., 3218-3238 S. Western Ave., **Chicago, Ill.**

"QUICK MEAL"
STEEL RANGES

ON BASE = = OR FEET

AS DESIRED

Careful attention to details and satisfactory service have made the "Quick Meal" steel ranges so popular that they are universally recommended as the leaders in beauty, quality and high class workmanship. They are known as "THE LONG LIFE KIND." The strength is placed where needed and not put in places merely to attract attention. The triple wall construction retains all the heat in the range, that is why they cook and bake so quickly and use so little fuel. "Quick Meal" ranges are made in different styles and many sizes and cannot help but satisfy the most exacting taste of the purchaser. They will prove quick sellers and good profit makers for the dealer who handles them.

RINGEN STOVE CO.

DIV. OF AMERICAN STOVE CO.

ST. LOUIS, MO.

SAN FRANCISCO, CAL. Indiana St. Between 20th and 21st.

Munsell's Mica

EUGENE MUNSELL & CO.
NEW YORK AND CHICAGO

THE STANDARD FOR HIGH GRADE STOVES

"Economy" Gas Heating Stoves
"Real Economy" Gas Ranges

The name **"Economy, Cleveland, O."** on your Gas Appliance is an absolute guarantee of the very **Highest Quality,** that skill and money can produce.

Twenty-eight sizes and styles of Heating Stoves. Thirty sizes and styles of Elevated Oven and Broiler Ranges.

Every One a Business Getter

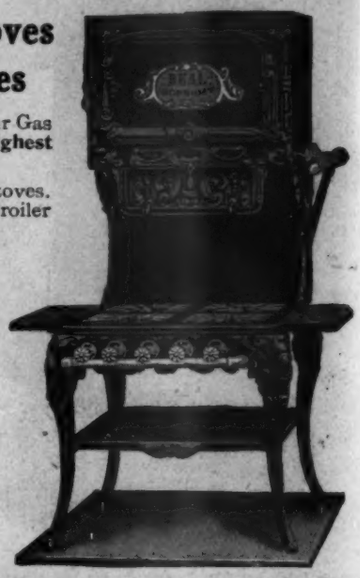
Write for catalogue No. 22 Then secure the agency for the "ORIGINAL" **Elevated Oven** and **Broiler** Gas Range, as well as the "ORIGINAL" **Circulating** and **Ventilating** line of Gas Heaters.

We Manufacture Gas Goods Only

Economy Stove Co.

Cleveland, Ohio

Branch Office
1209 Union Ave., Kansas City, Mo



HUB

Ranges
Parlor
Stoves

Furnaces
Steam & Hot
Water Heaters

Send for circulars and prices on the entire HUB line.

SMITH & ANTHONY CO.

52-54 UNION ST., BOSTON, MASS.

HERE'S A SNAP For Wide-Awake Range Dealers.

I am going to sell 1000 400-lb. six-hole steel ranges finished in Japan for not over

$15.00 Each

I'll sell the ranges too, so you'd better get in line and order now.

These Ranges formerly retailed at $60.00 each.

Send me a carload order and get my best cash discount, or I'll give dating to firms with satisfactory credit. What better proposition can you ask for, if you have a little capital, are sufficiently enterprising, and want to make money? Do You Know there is a big demand for the "Willard" Steel Ranges because they give perfect satisfaction, and don't cost too much? Then why don't you supply them?

WILLARD STEEL RANGES

are advertised in many leading publications, and the people know them and want them. Get my prices—It means profit, DOLLARS—to you. Every sale leads to another. I can sell you a better range than you can buy ANYWHERE for the money, one that cooks well and bakes evenly and perfectly, and will last a lifetime, with proper care. **Tell me how many ranges you can sell annually and I will make you a very interesting proposition.** Agents Wanted.

WM. G. WILLARD,
119 Willard Bldg., 320 Chestnut St.
ST. LOUIS, MO.

Faultless Malleable Ranges have the FIVE ESSENTIALS: Design, Finish, Materials, Workmanship and Durability. Write for new catalog, "Range Reasons."

Faultless Malleable Stove Works,
St. Charles, Ill.

WE want agents in every state in the Union to take subscriptions for THE AMERICAN ARTISAN. Agents can devote all or part time. Subscribers can make a nice little sum each week on the side by devoting their spare time to this work. Write for agents' terms. Sample copies sent upon request. Address THE AMERICAN ARTISAN, 355 Dearborn Street, Chicago, Ill.

THE ROYAL QUALITY

All that could be desired in a Range and one which offers every dealer a Royal opportunity to add a big seller to his line.

THE BODY is made of blue steel, lined with asbestos, held in place by sheet steel covering, well riveted.

THE OVEN TOP is arched. Oven bottom is well braced to prevent buckling or warping.

THE FIRE-BOX is arranged with reversible duplex grate, and hot blast linings.

THE RESERVOIR is porcelain lined.

You will like this range and so will your customers. It may be had with the new leg base or with cabinet base. Write for further particulars.

QUALITY STOVE & RANGE CO., - Belleville, Ill.

It's Up-To-Date!!
It's Modern!!

The Original Gold Coin

This splendid heater in its Modern Twentieth Century Dress is going to make new records this year as a money maker, just as it did last year.

With its beautiful and original design; its bold nickel trimmings that can not tarnish; its large Hot Air Flues, Powerful Base Radiation and other unexcelled features among which might be mentioned the special provision made for economical fuel consumption, it can not help being the "Best Seller" of the season.

The agency is **yours** if you can beat your competitor to it. Better get busy.

We have a brand new Catalog. Want a copy? A postal's enough.

CHICAGO STOVE WORKS
CHICAGO, ILL.

Perfect Light for the Country Home

DETROIT Combination Gas Machine

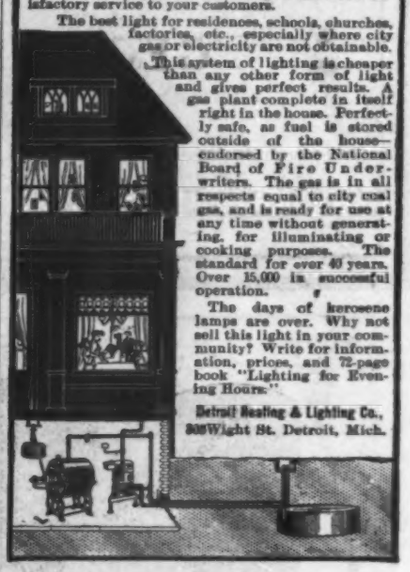
Here is a lighting system that not only means good profits for you but it will give the most satisfactory service to your customers.

The best light for residences, schools, churches, factories, etc., especially where city gas or electricity are not obtainable.

This system of lighting is cheaper than any other form of light and gives perfect results. A gas plant complete in itself right in the house. Perfectly safe, as fuel is stored outside of the house—endorsed by the National Board of Fire Underwriters. The gas is in all respects equal to city coal gas, and is ready for use at any time without generating, for illuminating or cooking purposes. The standard for over 40 years. Over 15,000 in successful operation.

The days of kerosene lamps are over. Why not sell this light in your community? Write for information, prices, and 72-page book "Lighting for Evening Hours."

Detroit Heating & Lighting Co., 308 Wight St. Detroit, Mich.



The Champion Interchangeable Gas Range

2 IN 1

The Range that does double the work of any other Gas or Coal Range

You can COOK, BAKE, ROAST and BROIL with Gas, Coal or Wood *without removing a burner*

More Economical than a Gas Range

Has six 8-inch cooking holes with reducing lids, two summer grates; oven, 18½ x 20½ x 14. Broiler 18½ x 20½ x 14. Warming closet of CHAMPION STYLE, body of polished steel, full asbestos lined. Made with the usual CHAMPION CARE.

A RANGE OF QUALITY, DURABILITY and ECONOMY

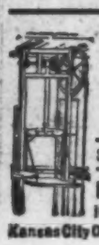
Write for Catalogue and Discounts

The Champion Steel Range Company
CLEVELAND, OHIO

HERE IT IS
The Ideal Epworth Acetylene Generator
It makes the Best, Purest, Safest and Cheapest Light known.

LIVE AGENTS WANTED.

Ideal Epworth Acetylene Co.
Johnstown, Pa. (or) Waterloo, Iowa



ELEVATORS

Improved, Quick and Easy Rising. Steam, Electric and Hand Power.

SEND FOR CIRCULAR

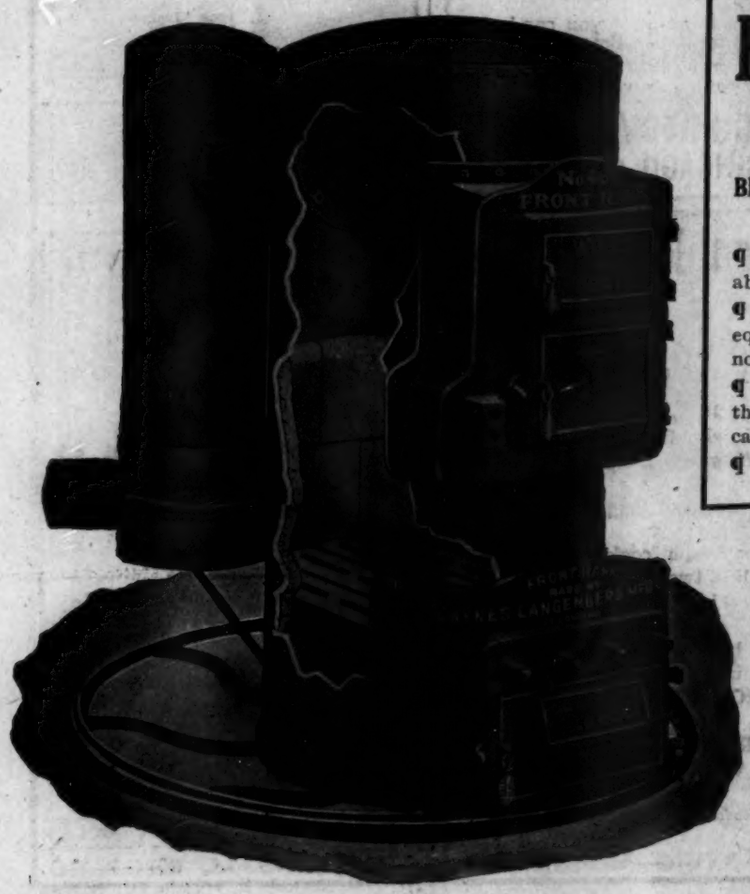
KIMBALL BROS. CO.
1031 Ninth St., COUNCIL BLUFFS, IOWA
Kansas City Office, Water Works Bldg., Kansas City, Mo.

FREE

Our new catalog of Clark Jewel Gas Heaters and Radiators, showing new Heaters and telling why they are the best.

Let us send you one.

GEORGE M. CLARK & COMPANY
DIVISION AMERICAN STOVE COMPANY
CHICAGO



FRONT RANK
Steel Furnaces

BETTER THAN ANY OTHER FOR THE VERY BEST OF REASONS

¶ **First**—They are made entirely of steel—absolutely gas and dust tight.

¶ **Second**—They burn any kind of fuel with equal success, making them extremely economical.

¶ **Third**—Radiators are large—more than three times the capacity of the smoke pipe—cannot choke up with the dirtiest coal.

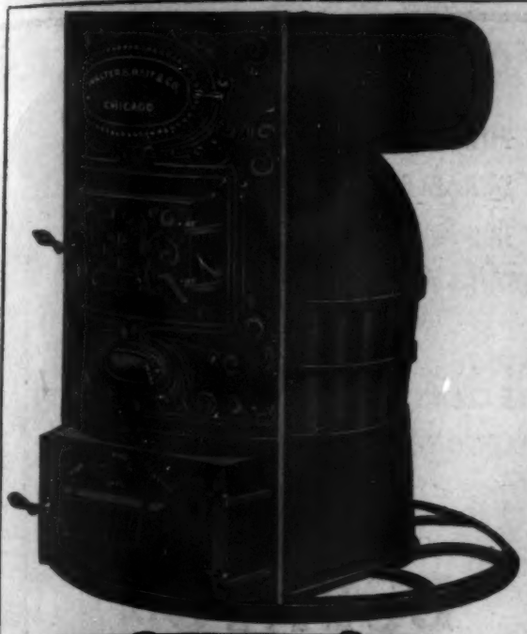
¶ **Fourth**—Combustion is positive and perfect.

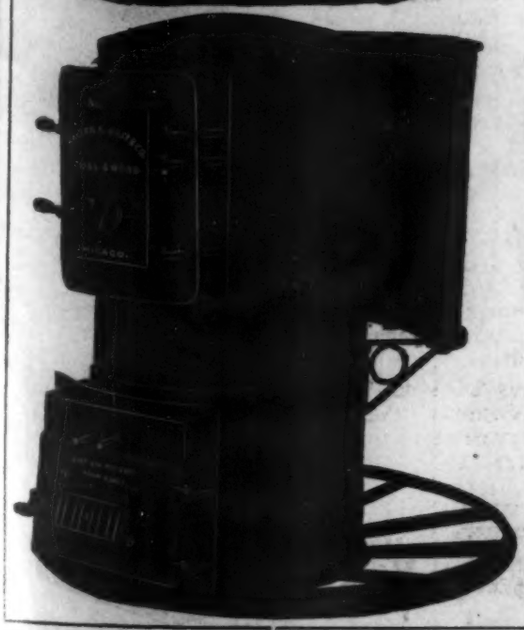
¶ **Fifth**—No direct draft to warp out of place and let the heat escape up the chimney.

¶ Lots of other splendid features. Let us tell you why there are 12,000 **Front Ranks** in St. Louis alone.

¶ Let us tell you how you can make more money installing furnaces. A postal will do.

Haynes-Langenberg Mfg. Co.
4045-4057 Forest Park Blvd.
ST. LOUIS, MO.





Walter S. Rait & Co.'s

High Grade FURNACES

Rait's Cast Iron Furnaces

¶ These are made either ALL cast iron or with heavy Steel Plate Return Flue Radiator.

¶ These furnaces are simple, durable and powerful heaters.

¶ They are made of the very best materials, are absolutely Gas, Dust and Smoke proof and sell at prices that are right.

¶ **Perfect heaters in all climates.**

Our Latest Addition

¶ This is a strictly up-to-the-minute furnace built to meet all the requirements of modern heating.

¶ It is handsome in design, low in elevation, simple and durable in construction, and withal a powerful and effective heater.

¶ In this furnace you find heavy steel plate, which is most desirable for quick heating, in the large return radiator.

¶ Durability in the fire section is insured by the use of heavy cast iron.

¶ You will like the size of the feed and ashpit doors.

¶ Your customers will be pleased to find that the furnace is absolutely gas, smoke and dust proof.

¶ Both you and your customers will be entirely satisfied with this heater.

¶ **It can't be beat.**

Our Heavy Steel Furnace

¶ See the large double feed door.

¶ Notice the staunch, durable appearance.

¶ This is as economical a furnace as you can ever hope to find.

¶ It is also about the most powerful and quickest heater on the market today.

¶ Absolutely gas, smoke and dust proof—all our furnaces are.

¶ Wouldn't you like to know more about it?

A postal will bring complete information regarding our entire line to your desk. Write today.

Walter S. Rait & Co.

211-213 Lake Street, Chicago, Ill.

Boynton's Square-Pot Crusader Furnace.

MOST POWERFUL
MOST DURABLE
MOST ECONOMICAL
EASIEST TO MANAGE
EASIEST TO KEEP CLEAN AND
EASIEST TO SELL

BOYNTON SQUARE-POT FURNACES

You should have our Catalogue on file. A postal card brings it.

Boynton Furnace Co.

147-149 Lake Street, Chicago **106 West 37th Street, New York**
230 Pacific Avenue, Jersey City

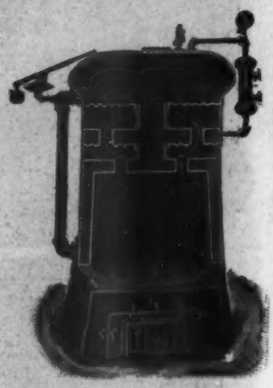
SUPERIOR
Warm Air
FURNACES
—
IMPERIAL
Steam and Hot Water
BOILERS

¶ **SUPERIOR FURNACES** are now recognized by all as embodying the high quality of merit indicated by their name.

They give perfect ventilation, are simple to care for, easy to control, respond quickly to drafts and checking, keep the house absolutely free from gas and dust, and are very economical in the use of fuel.

The SUPERIOR line is the most complete on the market.

We assist dealers in securing heating contracts at a good profit.



¶ **IMPERIAL STEAM AND HOT WATER BOILERS** with their many improvements are setting the pace for all competitors. The *FIRE BOXES OF EXCEPTIONAL DEPTH; DIRECT OVERHANGING FIRE SURFACES OF GREAT EFFECTIVENESS; and the CAREFULLY PROPORTIONED FLUES, arranged for Long Fire Travel and Shaped for Easy Cleaning*, are features deserving of considerable attention.

We pride ourselves both on the scientific perfection of our heaters and the care given to every detail in their manufacture.

WE WANT EVERY LIVE DEALER TO HAVE A COPY OF OUR CATALOG. WRITE US TO DAY FOR YOURS.

UTICA HEATER COMPANY, Utica, New York

Chicago Branch: 105 Lake Street, Chicago, Ill.

COLTON'S FAMOUS UNDERFEED FURNACE

CUTS FUEL BILLS IN HALF

Wouldn't your customers appreciate a furnace that will burn **the cheapest soft coal** and produce from it as clean, pure, powerful heat as the ordinary furnace produces from **the highest priced anthracite?**

A comparison between this wonderful UNDERFEED Furnace and any ordinary furnace in which the fuel is thrown on top of the fire, shows a startling difference.

Not only is it more economical, but it is cleaner, more sanitary and far more satisfactory in every way.

It is impossible to prevent an enormous waste when coal is fed in on top of the fire for half of it is bound to pass out of the chimney in the way of smoke before the fuel can reach the point of ignition, and besides it is dirty beyond endurance.

In the COLTON UNDERFEED the coals are pushed through the feed tube up underneath the fire by the simple pressing of a lever—this is the only correct method.

Why not be able to say, **"NO CINDERS, NO CLINKERS, NO DUST, NO SOOT,"** when offering your customers a furnace? **It would clinch sales.**

We want to get in touch with live dealers and will send some very interesting literature upon request. Write for it today.

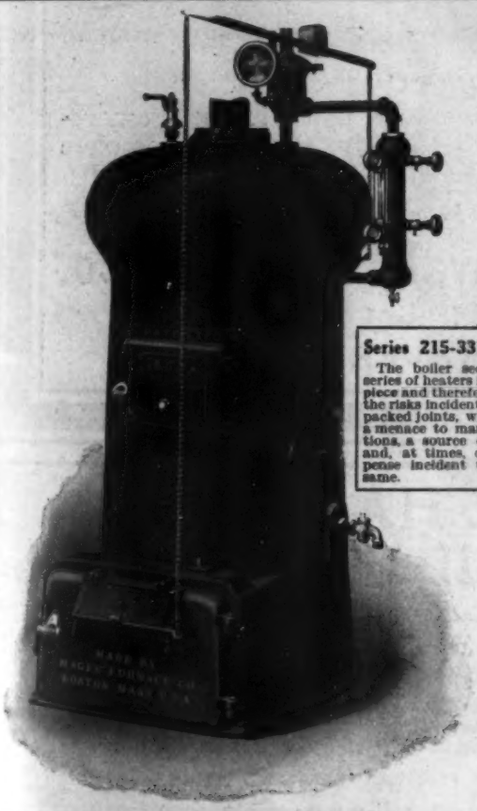
THE PECK-HAMMOND CO., Mfrs., Cincinnati, Ohio

Magee Round Heaters

Specially adapted to heating of

Dwellings, Cottages, Offices, Stores, Conservatories, Etc.

Any kind of fuel—anthracite or bituminous coal, coke or wood—burns with equal success in the **MAGEE HEATERS.** They have been tested to a pressure *exceeding 100 lbs. per square inch,* and will meet every reasonable requirement.



Series 215-331—STEAM

The boiler section of this series of heaters is cast in one piece and therefore free from the risks incident to gasket or packed joints, which become a menace to many constructions, a source of vexation, and, at times, of great expense incident to renewing same.

Series 115-131—WATER

Showing combustion chamber with practically self-cleaning surfaces, and vertical water ways.

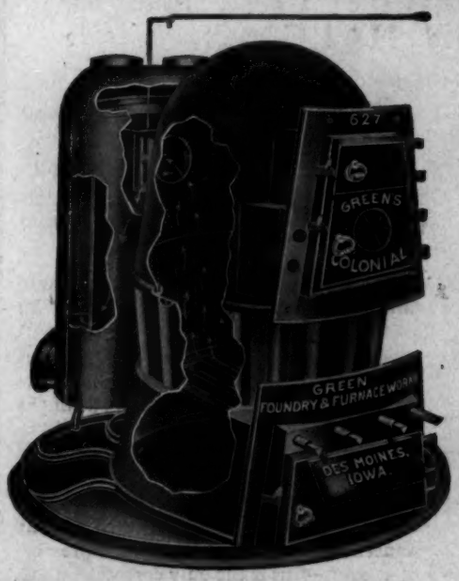
The gases of combustion surrounded by water from the grate to their exit in the chimney.

Write today for descriptive booklet

MAGEE FURNACE CO.

38 Union St., Boston, Mass. **86 E. Lake St., Chicago, Ill.**

Saved the Price of His Furnace in Two Winters' Use



Your customers are looking for a furnace which is economical and which will save fuel.

GREEN'S COLONIAL FURNACE

will help you build a big business.

Des Moines, Iowa, Sept. 20, '09.

GREEN FOUNDRY & FURNACE WORKS, Des Moines, Iowa.

GENTLEMEN: Your Colonial furnace, installed in my house in October, 1907, used the following amount of fuel:

First Winter . . .	**$40.76**
Second Winter . . .	**48 52**

(about one ton left over)

I heated my oblong ten-room house both winters, having plenty of heat at all times, plenty of hot water, no smoke, no soot, no clinkers. The arrangement of the grate in the new Colonial furnace is perfect. All of the coal is burnt, smoke leaving the chimney as white as from a wood fire. The draft and checks are simple and effective. I have had no expense outside of fuel, and cannot see where there is any need of any.

The first load of coal was delivered at my place in September of 1908, the last on April 20, 1909. Most of the last ton was carried over. The actual expense was $45.02 for the season, and when compared with an outlay of $110.00 in former years which I paid for wood and only had half enough heat, it is very satisfactory.

Yours very truly, J. W. DONOVAN.

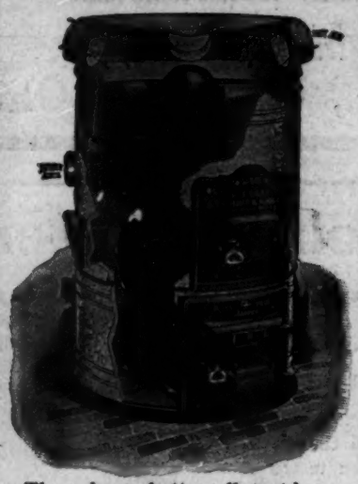
WRITE FOR CATALOGUE AND DISCOUNTS

GREEN FOUNDRY & FURNACE WORKS, DES MOINES IOWA

LINCOLN STOVE REPAIR COMPANY, Lincoln, Nebraska
State Managers for Nebraska.

ROWE CONSTRUCTION & HEATING COMPANY, Watertown, S. D.
State Managers for South Dakota.

GILT-EDGE FURNACES



There is no better all cast iron furnace than the GILT EDGE ALL CAST. Ask Us Why.

DEALERS like them because customers demand them. Customers demand them because they are backed by 30 years of excellent service.

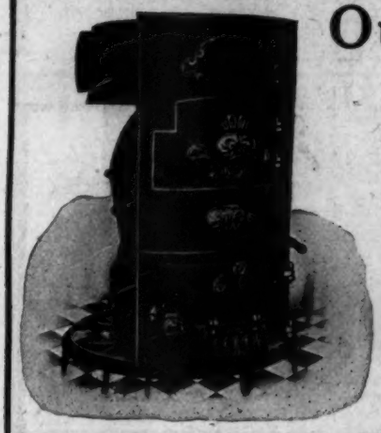
They are made in sizes and styles to meet any requirements. Undeniably the most complete line of furnaces sold.

Write to-day for the GILT-EDGE Agency.

R. J. Schwab & Sons Co.

Clinton-Park and Reed Streets,
MILWAUKEE, WIS.

Our New DE HAVEN All Cast Furnace



STRICTLY MODERN AND UP-TO-DATE IN EVERY RESPECT

All the latest features in modern furnace construction are embodied in the make-up of this furnace. Features:

Extra Heavy; Gas Tight; Burns all Grades of Hard Coal, Soft Coal and Wood; Simple and Economical to Operate; Top Return Flue Radiator; Large Radiating Surface; Rolling Bar Grate.

WRITE TODAY FOR CATALOG AND PRICES

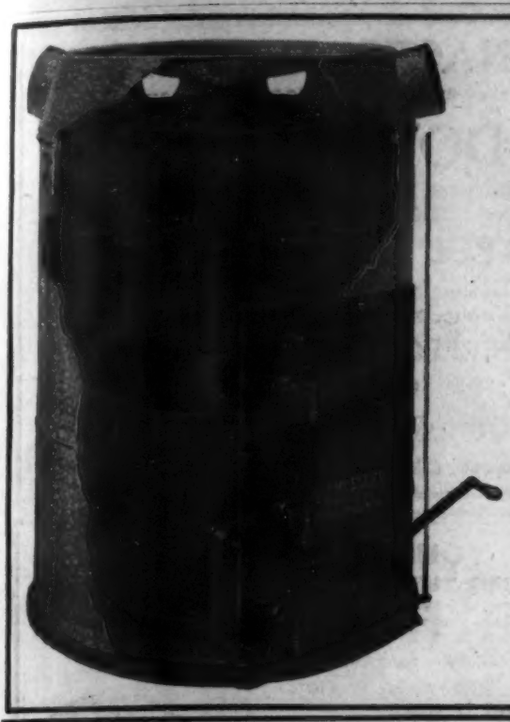
Youngstown Furnace & Supply Company

Manufacturers of the Celebrated LION-APEX and BESSEMER Series of Furnaces

Niles, Ohio

Chicago Branch
218 East Lake Street

ROOD & McINTYRE
Kansas City, Mo., Southwestern Distributor



The Confidence Placed In You By Your Customers

is an asset that is equal to your financial asset—it is up to you to retain or lose this confidence.

The easiest way to merit your customer's confidence is to give him goods of the highest quality and show him that the slight higher cost of such goods is more than offset by the superiority of the article.

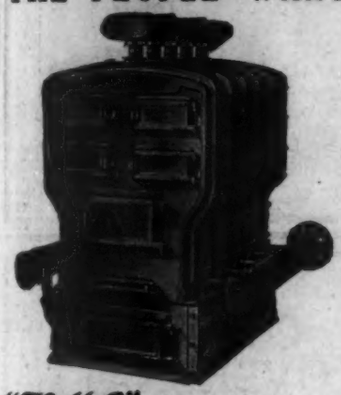
The sale of a "MUELLER" furnace will increase that customer's confidence in you.

Here is one point for the "MUELLER"—We do not only say, but we POSITIVELY GUARANTEE that the MUELLER All Cast, Double Radiator Furnace contains more Direct Heating Surface than any other heater made —Heating surface that is worth 100 per cent, and is far more valuable than any indirect surface obtained in most other heaters.

MUELLER Furnaces satisfy from the start.

L. J. Mueller Furnace Co.
Established 1857
191 Reed Street MILWAUKEE

THE PEOPLE WANT

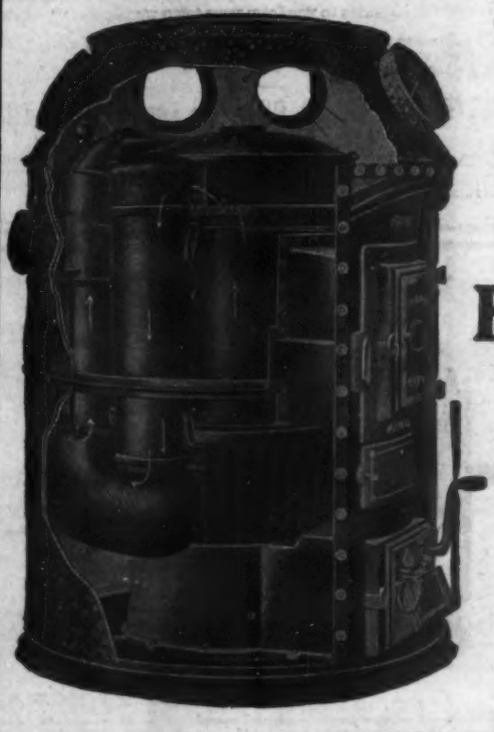


"K-M-C" BOILERS and KEWANEE RADIATORS

You can secure the contract if you install these goods.

Prices and discounts to the trade only.

Kellogg-Mackay Company
Heating and Plumbing Supplies
419 West 18th Street
CHICAGO
Minneapolis Seattle



One of the many styles in which

Floral City Furnaces

are made

Write for our new catalog just out. We can interest you.

Monroe Foundry & Furnace Co.
Monroe, - Michigan

C. N. HOOPER, Dubuque, Ia.
Vitreous Enameling TECHNOLOGIST
Designs, builds and starts new plants, improves quality and reduces the costs in those already established.

FUEL$AVER

There are many heat regulators on the market, but they are so complicated that what they save in fuel is soon spent out again to keep them in repair. The

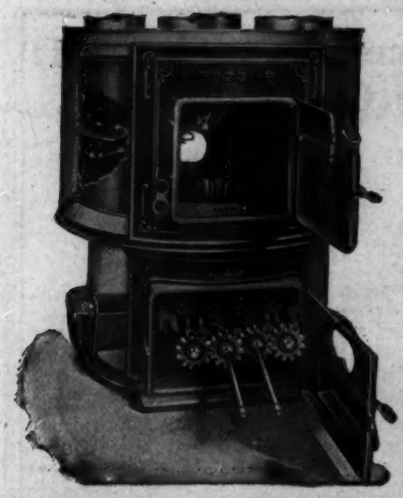
FUEL$AVER

Automatic Heat Regulator

has nothing about it that can break or wear out. Can be sold for about what others cost.

WRITE FOR BOOKLET TO-DAY

F. D. KEES MFG. CO., Box 828, Beatrice, Nebr.



GOOD FURNACES IN DEMAND

This is now a recognized fact among *all furnace dealers* and the new

LOW DOWN AJAX

will quickly and surely increase your sales. Made with 21 and 24 inch fire pots. No. 221 46″ high. No. 224 49″ high.

LARGEST STEEL RADIATOR MADE

It has the Draw-Out Triangular Grate. High Roomy Ash Pit. Water Coil Openings.

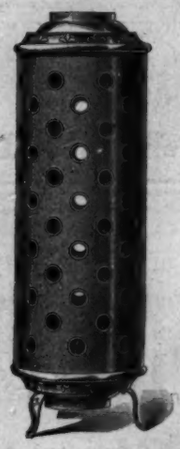
LOW IN PRICE—PERFECT IN OPERATION

We have them in stock. Call and see them.

CO-OPERATIVE FOUNDRY CO., ROCHESTER, NEW YORK.

Western Branch: 505 South Clinton St., Chicago, Ill. Phone Harrison 6373

RED CROSS STOVES & RANGES



SAVE HALF YOUR FUEL

BY USING THE

ROCHESTER RADIATOR

Satisfaction guaranteed or money refunded. Over 100,000 of them in use. Fits any Stove or Furnace.

We make the original and genuine Rochester Radiator

We do not sell to Catalogue Houses.

Price, from **$2.00** to **$12.00**

FOR HARD OR SOFT COAL, WOOD OR GAS.

We refer all inquiries to you from your town when you carry a stock of our Radiators.

We guarantee our Radiators not to interfere with or choke the draught. They are easily cleaned.

Write for descriptive Catalog and Prices.

ROCHESTER RADIATOR CO., 125 Furnace St., ROCHESTER, N. Y.

Boston, Mass., S. M. Howes Co.; Detroit, Mich., Standart Bros., Ltd.; St. Paul, Minn., Farwell, Ozmun, Kirk & Co.; Omaha, Neb., Wright & Wilhelmy Co.; Sioux City, Ia., Knapp & Spencer Co.; Kansas City, Mo., The Harbison & Modica Mfg. Co.; Kingston, N. Y., Canfield Supply Co.; Portland, Ore., F. W. Isherwood, Esq.; Hamilton, Ont., The D. Moore Co.

The Sprague & Western Underfeed Furnaces

are fed from below and make a saving in fuel cost not possible with any other furnace.

There are other advantages set out in our new catalog, which will be mailed for the asking.

Sprague Foundry & Mfg. Co.

COUNCIL BLUFFS IOWA

The New CELLULAR OVERDRAFT FIRE POT

HAVE YOUR FURNACES GOT IT?

Better write us.

THE BONNOT COMPANY

CANTON, OHIO

Handle the Best Furnace

Don't be satisfied with your furnace business unless you are securing the majority of the heating contracts in your town or vicinity.

Upon the furnace you handle depends the amount of business you do. If it's the

MONCRIEF Top Return Flue Warm Air FURNACE

the best orders cannot get away from you. This is a furnace in which all the up-to-date features of merit are combined in perfect harmony—securing economical and satisfactory heating. *Write for Catalog.*

HENRY & SCHEIBLE COMPANY

825-29 Long Ave., N. W., CLEVELAND, OHIO

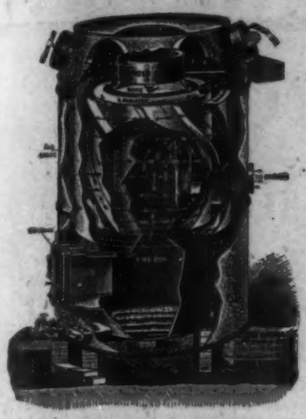
J. C. KIMMEL, 3314 East 15th St., Kansas City, Mo. Western Sales Agent.

YOU

Need a Tinner, Furnace Man or Hardware Clerk? A want ad in

THE AMERICAN ARTISAN

That's all that's necessary to solve the problem.



NEAL'S NEW IMPROVED GAS FURNACE

Because of its distinctive features the most powerful and economical Gas Furnace made.

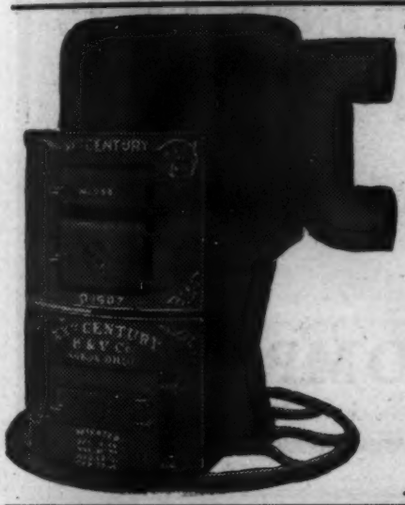
Neal's New Improved Gas Furnace will be found unequaled for heating dwellings, stores, churches and school-houses.

FEATURES:

Cast Iron Door with mica front and cooling partition, permitting the air to pass into the combustion chamber. Air travels over one-third more heating surface than in other furnaces. Oblique warm air flues between radiators. Double and Triple gas tight radiators. Large fire box and dome. No joints to leak gas. Enormous radiating surface.

These features and many others have made Neal's New Improved Gas Furnace a money-making proposition for any dealer. Write us to-day for catalog.

THE PICKETT HARDWARE CO., Ltd., Warren, Pa.



A Passport to Comfort

Is what everyone receives who buys a XXth Century Heater. Dealers are reaping the benefit of this fact. Write for illustrated catalogue which tells all about it. Mailed promptly on request.

XXth Century Heating & Ventilating Co.

Manufacturers of the Celebrated XXth Century Line of Warm Air Furnaces and Steam and Hot Water Boilers.

GENERAL OFFICE AND FACTORY AT AKRON, OHIO.

SAVES 75% OF THE FREIGHT

The Handy Nested Stove Pipe T Joint

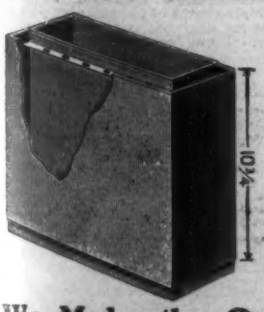
These T joints nest together so closely that 90 per cent of room is saved in shipping them. This means fewer crates and a saving of 75 per cent in shipping. No damage is done in shipping. This is stronger and neater than a hand made riveted **T**.

It is always ready for use. Two bolts fasten it together and it fits perfectly.

This **T** joint is always neat, clean and salable. Made in Common, Polished Blue Steel and Planished Iron. Ten 12-inch joints are packed in a crate 7x8 inches and 14 inches long, weighing 15 pounds.

ASK YOUR JOBBER FOR PRICE AND SAMPLES.

KINNE MANUFACTURING CO., Minneapolis, Minn.



The MICHIGAN SAFETY FURNACE PIPE COMPANY

Corner Brooklyn and Abbott Streets.

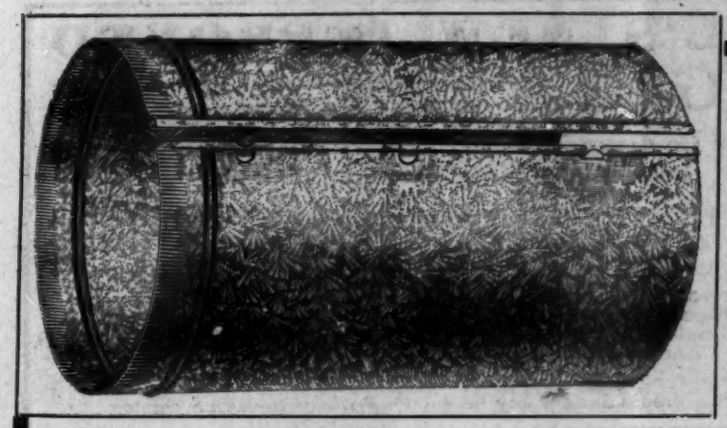
DETROIT, MICHIGAN

Manufacturers of A PERFECT HOT AIR FURNACE PIPE, SAFETY WALL PIPE, SINGLE PIPE and FITTINGS in both Tin and Galvanized Iron.

WRITE FOR OUR LATEST CATALOG.

We Make the Only Sectional Furnace Pipe in which the Inner Walls Form the Cross Walls.

No Wings to Pull Out. **No Cleats to Bend.**



One On The Railroad Companies

A small crate holds a lot of our

NESTED TIN AND GALVANIZED IRON PIPE

THAT'S where we put one over on the Railroad Companies, for it saves a lot on the freight bills.

This together with the big demand for it has brought the price of our pipe down to where it doesn't pay to make it in your own shop. That's enough for the price.

Now for the quality and merits of the goods;—It can be put together at the job without any tools or stakes. The edges are locked by simply putting them together. Telescoping is impossible when the three notches, shown in the cut, are turned over the seam—it isn't even necessary to hammer down the seam.

And it presents a highly finished and mechanical appearance when put together.

Let us send you our catalog. A postal will do.

- F. MEYER & BRO. COMPANY -

PEORIA, - - - - ILLINOIS

BOOKS BY MAIL.

☞ The publisher of THE AMERICAN ARTISAN will take pleasure in supplying Books, of whatever character, at catalogue prices, prepaid by mail, to any address, on receipt of price. The following are in lines especially represented by this journal.

NO BOOKS EXCHANGED

SHEET METAL WORKING.

GRAY'S PERFECT ELBOW PATTERNS.

On heavy blue print paper. From one inch to twenty inches; price $1.50, prepaid. From twenty inches to forty inches, price $1.50, prepaid. From one inch to forty inches, made in 2, 3, 4, 5, 6 7 and 8 pieces with 160 patterns and angle chart showing all angles and degrees of same gotten from 160 patterns, price $3.00, prepaid.

GRAY'S PERFECT SKYLIGHT PATTERNS.

For single pitch, gable and hip skylights. Contains 6 to 8 and 10-inch ventilator patterns and skylight chart, giving the length to cut hip and rafter bars for any size skylight up to 24 feet wide, for ¼ pitch skylights. Full set of patterns and charts. Price, $3.50, prepaid.

TIN, SHEET IRON AND COPPER PLATE WORK.

This is a work of the greatest value to all who work in sheet metal. It describes the method of laying out nearly everything which the metal worker will be called upon to make. Joints, elbows, and all kinds of kitchen utensils are fully described. The work is supplemented by rules for mensuration and hundreds of valuable receipts. By L. J. Blinn. This book contains 296 pages with 169 illustrations, bound in cloth. Price, $2.50.

TINNERS' HELPER AND PATTERN BOOK.

By H. K. Vosburgh. Rules, diagrams, tables, 128 pp, 55 figures. Price, $1.00.

PATTERN-MAKERS' HANDYBOOK.

A valuable work for the beginner. It is thoroughly practical and has a deservedly large sale. By P. N. Hasluck. Price 50c; 50c edition is paper.

THE CORNICE WORK MANUAL

Is a 240-page book, illustrated with 104 engravings. It is thoroughly indexed and attractively gotten up, with substantial red cloth covers, embossed in gold. Chapters treat of The Cutters' Bench, Drawing Tools and Angles, Cutters' Tools, The Entablature, The Reading of Drawings, The Measuring of Cornices, Estimating, Right Angle Mitre Patterns, Bracket Patterns for Panel Sections, Right Angle Return Mitre Patterns, Patterns for a Pediment and Their Development, Patterns for a Segmental Section of a Pediment. Details and Patterns for a Finial, Bracings and Fastenings of Cornices to Buildings, Staging and Scaffolding for Cornice Work, Ornament Stamping Machine, The Management of Ropes and Hoisting Tackle, Plan and Details of a Gable and Horizontal Cornice, Detail of Slating and Slaters' Tools, Details for Horizontal and Raking Mitre Patterns, and the development of Details and Patterns of the Turrets. Price, $3.50.

THE TINSMITHS' PATTERN MANUAL.

A 250-page book, containing over 200 illustrations. By Joe K. Little. This book gives several methods for developing some of the most difficult and complicated patterns. It also devotes considerable attention to patterns of irregular shape and unequal taper. The laying off of patterns by triangulation is shown at length. This book is eminently practical and is recognized as the paramount practical authority in its chosen field. Price, $3.50 per copy.

SHEET METAL WORKERS' GUIDE.

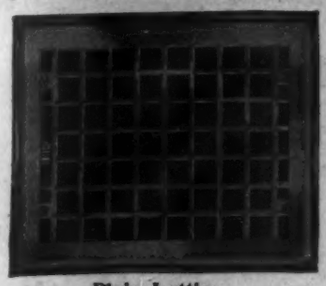
A collection of rules and diagrams, for describing the most useful patterns ordinarily required, preceded by chapters on Sheet Metal Work, Soldering, Geometry as applied to Sheet Metal Working. By W. J. E. Crane. Price, postpaid, 60 cents.

100 TINNERS' PATTERNS.

THE AMERICAN ARTISAN Full Size Patterns printed on manilla paper, from which they are readily transferred to heavy sheets and cut out ready for use. Price, sent postpaid, for the full set of 100 patterns, $1.

DANIEL STERN, PUBLISHER AND BOOKSELLER, 355 DEARBORN STREET, CHICAGO

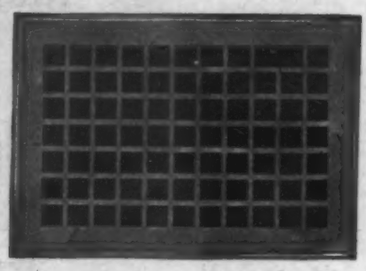
WROUGHT STEEL REGISTERS



Plain Lattice.

The kind specified by the U. S. Government. Roller Bearing Movement—never sticks or catches. Valves are Self-locking.

The kind used for shallow flues. Can be placed EITHERWAY—upright or across.



The Reversible Wafer

FERROSTEEL COMPANY, Cleveland, O.

NONE SO GOOD AS THE GENUINE

PADGETT

HARD WOOD COLD AIR FACES AND VENTILATORS

We would like to hear from interested dealers.

¶ The correct process for manufacturing Hard Wood Cold Air Faces and Ventilators is known only to the owner and inventor of the PADGETT.

¶ All imitations are more cheaply constructed and lack the permanent beauty and durability which characterize the goods we produce.

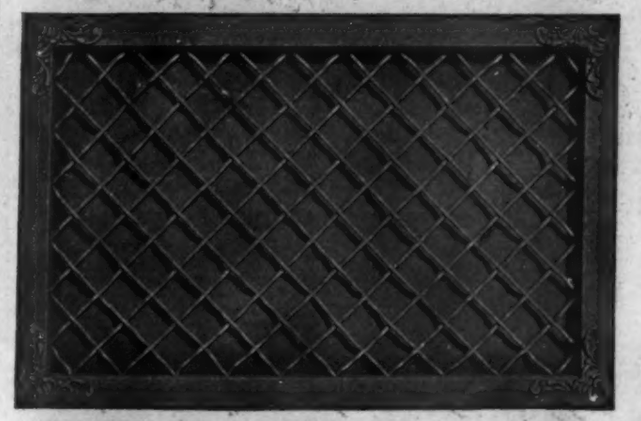
¶ Our designs are original and constructed by the best artists—the highest grade materials only are used.

¶ They add greatly to the appearance of any room, whether used as Floor Faces, Side Wall Faces, Hall Seat Fronts, or placed in Stair Panels.

¶ All goods are of sufficient weight to insure strength and durability without clumsiness.

THE WOODEN VENTILATOR CO. No goods genuine without the Company's stamp, watch for it. Main Office and Factory: EAST PALESTINE, OHIO

BRANCH WAREHOUSES { 155 East Lake Street, Chicago, Ill. 827-837 N Street, Lincoln, Neb. 1201-3-5 Ninth Street, Kansas City, Mo. 420 Deaderick Street, Nashville, Tenn.



WIRE GRILLES

Quality

counts in wire grilles as well as in cast iron or stamped steel goods.

We manufacture all three kinds.

Send for prices.

Tuttle & Bailey Mfg. Company

New York Chicago Boston

FOR BASEBOARDS

Walworth Deflecting Wall Register

FOR SIDE WALL

Can be used on a "Double Head."

This register takes the place of the convex, and costs less money.

It takes up no room in the wall pipe, has a face of large open area, is made in standard sizes, fits regular stock sizes of fittings, is equipped with a wall frame and is attached to the pipe in the same manner as the ordinary valve register.

Our registers are made in THREE STYLES, Vertical, Horizontal and Baseboard. We are also makers of the famous SEMI-STEEL Floor and Convex Register, all sizes and finish.

LET US QUOTE YOU PRICES

The Walworth Run Foundry Co.

Largest Gray Iron Foundries. Estimates Furnished for Castings.

Filmore, Talcott and West 27th Streets
CLEVELAND, OHIO

Illustrating a New Line of

"NEVER FAIL" RANGES

Of Very Latest Colonial Design and Highest Grade

PALACE NEVER FAIL
Made with and without hearth

The Neatest, Most Artistic Design
ever put on a Cast Iron Range

Channon-Emery Stove Co.

Quincy, Illinois

Order sample if You Want the Best at Fair Price.
Write for catalog of complete line of stoves and ranges.

ESTABLISHED 1880.

THE AMERICAN ARTISAN & HARDWARE RECORD

Representative of the Stove, Tin, Hardware, Heating and Ventilating Interests.

PUBLISHED EVERY SATURDAY.

TERMS OF SUBSCRIPTION IN THE UNITED STATES AND ITS POSSESSIONS, (Invariably in advance): ONE YEAR, POSTAGE PAID, $2.00. IN FOREIGN COUNTRIES INCLUDING CANADA, ONE YEAR, POSTAGE PAID, $4.00

Address all Letters, Communications, and Remittances to

DANIEL STERN, PUBLISHER AND PROPRIETOR,

355 DEARBORN STREET, CHICAGO, ILL.

Entered as Second-Class Matter June 23, 1885, at the Post Office at Chicago, Illinois, under Act of March 3rd, 1879.

CHICAGO, OCTOBER 9, 1909.

THE PUBLISHER IS PLEASED TO ANNOUNCE THAT THE AMERICAN ARTISAN WILL BE SENT FREE OF CHARGE FOR THE REMAINDER OF 1909 TO NEW SUBSCRIBERS FOR THE YEAR 1910. YEARLY SUBSCRIPTIONS SENT NOW WILL BE CREDITED TO THE END OF THE YEAR 1910.

A BILL providing that Express Companies and owners of moving vans must report to the Chief of Police all removals in the city of St. Louis, Mo., giving the old and new addresses of the families moving, will be offered in the St. Louis Municipal Assembly at an early date. The St. Louis Retail Grocers' Association, through its Legislative Committee, will ask the Real Estate Exchange and other organizations interested in keeping tab on people who may find it cheaper to move than pay debts, to send delegates to a conference to be held soon, at which the bill will be drafted and arrangements for having it introduced made. The law is to be framed after one in Nashville, Tenn., and other cities, where it has proved of great service to merchants, landlords and others.

THE STATE Prison Board of Indiana met at Indianapolis recently with Governor Marshall to consider the possible abandonment of binder twine making at the Michigan City Prison. It was announced that the National Harvester Company has closed a deal with the authorities in Yucatan, where all the sisal used in the world's manufacture of binder twine is grown, by which the authorities have agreed to hold up the price of the raw material to prison plants and to independent establishments, so that they cannot buy and manufacture the twine at a cost to enable them to undersell the so-called trust. If this condition comes about, as the Board and the Governor expect it to, there will be nothing to do except to close the plant since it cannot be expected that the farmers of the state will purchase prison-made twine at a cost to exceed that of the trust-made goods. However, if any way is found by which the raw material can be purchased at a reasonable market price the Board believes that it can continue the fight against the trust in the state and make the prison plant pay. It is cited that such a plant at Stillwater, Minn., has virtually driven the "Twine Trust" out of that state and now has a deposit of approximately $1,000,000 in the Minnesota banks.

The Dollar Minimum Check.

"THE agitation over the law prohibiting the issuance of checks less than one dollar," said Solicitor Reeves, of the Treasury Department recently, "must have started just as a panic starts when some fool hollers fire in a theater. There is no basis for the row at all. A man may issue a check of 25 cents just as he might for $10,000 if he has the money in the bank."

This prohibition has reposed in the banking act of the United States since 1862. It was enacted to fit in with a situation having no bearing on present conditions, and it cannot apply to ordinary commercial checks. The Treasury authorities are at a loss to understand whence the present agitation of the question arose and why. They suppose that someone unearthed the old law and just started in to make a noise about it with expectedly successful results. Many inquiries have reached the Treasury, with the result that Acting Secretary Norton referred the question to the Solicitor's office. The latter gave an opinion to the Secretary, in which the view that the law has no force at present is expressed.

"The concern of the question of the legality of issuing checks for less than $1 is entirely needless," said Mr. Norton. "In 1862, in order to raise funds for war purpose the law was passed placing postage in general circulation as money. It was important this arrangement should not be interfered with by individuals issuing notes or checks to be used in fractional currency. A clause was therefore inserted to prevent this.

"A bank check is an order on a banker to pay a designated sum of money. It is not intended to be put in circulation as a substitute for money. There is no conflict with this ancient law in issuing checks for any amount however small. Such has been the construction placed upon the law by the Treasury from the passage of the act in 1862 down to the present moment."

Now Is the Time to Buy.

THERE has been a marked advance in the iron and steel market and the indications are that before long a high-water mark in prices will have been reached, owing to the rapidly increasing demand, which for pig iron and steel, greatly exceeds the present supply.

Since the first of September the whole iron situation has changed wonderfully. To use the words of a prominent factor in the trade, "It certainly looks as if pig iron were about to again assume the title of 'Prince' and forget all about the pauper days of the panic. To-day there is nothing to indicate that there are any bounds or limits to the trade either in extent

of demand or price." The most recent advance is $2 a ton in the price of steel sheets and tinplate, the increase in the price of pig iron and steel scrap being cited as the reason for this. This is the first advance in tinplate since the "open market" was declared. Idle plants are being pressed into service and strenuous efforts are being made by manufacturers to cope with the buying spirit that has invaded the market.

Orders for stoves, furnaces, hardware and all metal products are being placed with great liberality in the event of a further strengthening of the market which to all intents and purposes is inevitable. It is a well known fact that everybody wishes to buy on a rising market and this feeling is just now being put into action with a vim that is indicative of still higher prices of iron and steel products in the very near future.

During the past few months the market for certain lines of hardware, notably galvanized, enameled, japanned and pieced ware has been abnormally weak and the bottom of the market had been reached, but this condition now no longer obtains, and the market for these commodities is waxing stronger as is the case with metal products generally.

During the slump in the iron and steel market the price of stoves was not affected, as the special grades of sheet steel and iron used by stove and furnace manufacturers did not feel the effect of the "open market." Now, however, a change has taken place which warrants the assumption that very material advances will shortly be made in the price of this commodity, and the slogan is, "Buy Now." No one is anxious to buy on a declining market, but there is always a rush for the "band wagon" when the market takes an upward turn, as is now the case.

The market for all kinds of hardware is gaining in strength as a result of the expansion in the iron and steel trade, and higher prices than have prevailed for many months past are looked for. The wise merchant is the one who is quick to take advantage of this upward turn in the market by stocking up now, thus avoiding compulsion to buy at higher prices which are almost certain to obtain later on.

Heavy Freight Shipments.

THE RECOVERY of the transportation business of the country to a point equaling in tonnage the highest record ever made in the freight business of the railroads has now been effected. The line has been reached that puts into service all surplus freight cars, and yet the heaviest tonnage period of the year is not yet reached. The bulk of the grain has yet to be moved from the West, but the eastbound shipments of freight exceed in tonnage this month the very great shipments of 1907.

The Western demand for supplies drew from the Eastern and central distributing points immense shipments during August, and the orders are growing heavier each month as the cash is realized by the farmers from the sales of their grain and cattle. When the greater shipments of grain and the fall products of the farm of various classes, including live stock of all kinds, are offered to the railways for transportation to the East at the same time the local demands for transportation of coal, coke, iron, steel and machinery flood in upon the railroads, the merchants and shippers as well as the consumers and those dependent upon receiving supplies will realize how great has been the reaction from depression and how enormous and widespread are the activities now prevailing.

The high prices for food products have not decreased their consumption, but, upon the contrary, a larger demand arising through our increased population and the unprecedented number of steadily employed people in our industrial centers has been met by larger shipments from the farms.

This fall and the winter will certainly tax the transportation facilities of this country, especially those of the Middle West, to their utmost. The railway managers are aware of the situation, and, while doing their very best to avoid the congestion of freight, are rejoicing at the approaching tidal wave of shipments.

Registered Mail Charge Increased.

POSTMASTER-GENERAL HITCHCOCK has signed an order increasing the fee for the registration of mail from 8 to 10 cents, to take effect on November 1, 1909. This action followed the recommendation of the committee now investigating the registry service and is in accord with the views of the registry experts recently in conference at Washington.

The order also increases the maximum indemnity paid to the owner of a lost or rifled registered letter from $25 to $50, thus doubling the department's liability for valuable articles intrusted to its registry branch. This additional insurance of $25 for two cents is granted at a much lower rate than is offered for a similar amount by any private concern.

The changes ordered, the Postmaster-General says, constitute the first move toward making the Postal Service self-sustaining. The registry system is now conducted at a loss, and to make it pay its way radical measures are necessary.

The committee investigating the subject has proposed some new features which are now being considered by the Postmaster-General. These include the establishment of a parcel registration system with a five cent fee and a small indemnity, and a preferred class of registered matter of high value with increases in the fee and indemnity up to 20 cents and $160, the limits fixed by law.

It is pointed out by the officials that the parcel measure will meet a public demand for a cheap and safe means of transmitting Christmas packages and others of like character, and that the graduating of the fee in accordance with the risk involved and the amount of cars necessary to insure safe transmission is in accord with sound business principles.

It also has been suggested that the idea be carried a step further by asking Congress to raise the limit of fee and indemnity, so that the department may assume full liability for all matter accepted for registration and may impose an adequate charge for the responsibility undertaken. In addition to these changes affecting the amount of fees and indemnities, the Postmaster-General's committee of experts has under

consideration some important modifications of the registry system that should lessen considerably the cost of operation without any impairment of the efficiency.

RANDOM NOTES AND SKETCHES.

BY SIDNEY ARNOLD.

Inasmuch as both moisture and oxygen are necessary in order that corrosion may proceed, it can easily be seen that the duty of a protective paint is to exclude both of these elements. It is well-known that a linseed oil film is an expensive porous structure acting somewhat as a sponge toward moisture and freely allowing the passage of oxygen. The function of the pigments employed in paint is therefore at least threefold, says William H. Walker in the *Engineering Magazine*. First, the more obvious one of imparting a color thereto; second, the most important one of filling up the pores or interstices in the oil film, thus rendering it as little impervious to moisture and air as possible, and third, to aid the composite film in drying or oxidizing to a compact impenetrable covering. Very little work has as yet been done upon paints from this point of view, but with a clear conception of the factors involved in the corrosion of iron, an intelligent study is made possible and valuable results can be predicted with certainty. The porosity of paint films containing no linseed oil, but composed of various bituminous materials which may be adapted for the purpose, is also a field which can be studied with profit.

* * *

Economizing time is the first principle in acquiring success. Many men pinch pennies and squander hours. They overlook the fact that an hour properly utilized is worth many pennies. Economy and extravagance are not antithesis, they are closely allied. If one is not careful his economies will merge into wastefulness. "Cicero," says Disraeli, "practiced that magic art in the employment of time which multiplies our days." That man lives the longest who gets the most hours out of every day and the most value out of every hour. The father of Henry George was a business failure because, according to Hubbard, "he didn't know the value of time. Other people did things while he was getting ready to commence to begin." In this energetic age long waits are apt to defeat great hopes. Napoleon observed that "it is always the quarters of an hour that decide the fate of a battle." He who knows the value of minutes never wastes hours. Montaigne measured every hour by its possibilities. Emerson says of him he "tastes every moment of the day." Too much system is often more wasteful than not enough. You will generally find that a man who is extravagantly economical is a pessimist. He has no grasp on life, no appreciation of its problems and possibilities. One of Lord Chesterfield's commands to his son was to "know the true value of time." It has been said that "minutes are the mills, hours the cents, days the dollars in the mintage of eternity." The profit on time, however, is not represented by dollars entirely. Shakespeare was one who made good use of his hours. He was an economist of time. He died poor, but left a fortune worth more than the richest Croesus who ever made a will. Most men who have achieved great objects have known how to coin time into profit—the profit of results. Time gives us our opportunities—it is for us to improve them. If we disregard the minutes the hours will overwhelm us. To paraphrase an old saw—take care of the minutes, and the hours will take care of themselves. Then we will begin to realize, with Franklin, that "time is money."

* * *

The world is gradually gaining universal knowledge of the great truth that "it pays to advertise." Even the farmers of California have learned it, although advertising does not ordinarily seem a part of agriculture. The California fruit growers have a committee on advertising, and are using $50,000 this year, as against $25,000 last year, and $5,000 two years ago, in this publicity business. No better proof is needed that it is bringing returns. But there is other evidence. In a single town—Sioux City—the number of cars of California fruit used was doubled in a year as a result of the advertising campaign. And other states will follow California's example. Florida is about to launch an advertising campaign in the interests of its fruit growers, and Hawaii, noting the good results in California, will follow suit. When farmers start advertising and realize the immense advantages offered by it, surely there can be no one who will deny that advertising pays. If such an individual exists he is living in the wrong age and should have breathed in prehistoric times.

* * *

The Polar controversy between Commander Robert E. Peary and Dr. Frederick A. Cook, is the subject of the following mild poetical pasquinade from the facile pen of my old friend, Jim Reed of the Stove & Range Co. of Pittsburgh, Pittsburgh, Pa. Jim evidently believes, with all right-thinking people, that there is glory enough in the discovery for both explorers. The appellation, "Good Luck," which he humorously applies to Dr. Cook, and which, by the way, is the trade name of the stoves and ranges manufactured by his company, is very apropos. "The Pole Hunters" was published in a recent issue of the *Williamsport* (Pa.) *News*. Seeing that it deals with the "Top of the World," I guess it is up to me to put it as near to the top of my "peerless collection of priceless poetry" as its merits will permit. There are lots of people who class themselves as poets that can't hold a candle to Jim Reed at that.

THE POLE HUNTERS.

It was "Good Luck" Cook had walrus meat
When he arrived at the northern pole,
For Old Jack Frost offers nothing to eat
To intruders who cross his goal.

But why didn't he wait for a summer's day
That must follow the storms and snows,
When Old Jack Frost is raking the hay
That the sturdy Eski-mo(w)s?

Oh! the "Top of the World" is a dynamo
That makes current for the northern light,
It has positive and negative poles, you know,
So, perhaps both explorers are right.

Now as arguments come and arguments go
There will be a long Arctic night;
For of what use is that old dynamo
With both of its poles in a fight?

News Siftings

The Anchor Stove & Range Company, Louisville, Ky., have recently issued their 1909-1910 catalogue, No. 44, of "Anchor" Stoves and Ranges. It comprises 168 pages replete with illustrations of the company's products.

John P. Ley & Company, New York, N. Y., to manufacture and deal in stoves, ranges, heaters and furnaces, has been incorporated with a capital stock of $10,000. The incorporators are: John P. Ley and William S. Ley, both of Elizabeth, N. J., and Walter Richards of Brooklyn, N. Y.

Philip Feldman, one of the old-time stove dealers of Brooklyn, N. Y., and well known in the stove trade of that city and New York, died recently. He started business many years ago in Brooklyn and grew to be a very prominent stove dealer. He retired from business a few years ago and was succeeded by his son, Albert E. Feldman, who still continues the business.

The S. M. Howes Company, 40-46 Union Street, Boston, Mass., are mailing to the trade a neat appearing folder concerning the "Antique Franklin," an open cast iron stove or portable fire-place for wood or coal. It is handsomely ornamented with knobs and rosettes made from cast brass, and is said by the company to be a replica of a very old Philadelphia "Franklin" stove, which meets the requirements of the discriminating purchaser of antiques.

The recent fire at the Cincinnati plant of The S. Obermayer Co. was not as disastrous as first reported, there being a damage of only $40,000 to one of their several warehouses. Business was not interrupted and they shipped all orders promptly. The loss has been satisfactorily adjusted and as a result of the fire new and enlarged storage bins and warehouses are now being constructed, and The S. Obermayer Co. will be in better position to take care of their rapidly increasing trade of foundry facings and foundry supplies than ever before.

The Fox Furnace Company, Elyria, Ohio, advise that they carry a large stock of Fox "Ideal" Base-Burners, and that they ship the day the order is received. These base-burners are of smooth design, of five-flue construction and are provided with extra heavy fire-pots. Other features are, lift-off nickel, large magazine, ash pan, elegant urn, modern grate, and automatic magazine cover. The manufacturers state that the Fox "Ideal" are the heaviest and best fitted stoves manufactured. No. 140 has a 14-inch fire-pot and weighs 450 lbs., No. 160, a 16-inch fire-pot and weighing 500 lbs. The trade is requested to write for prices. When writing, kindly mention THE AMERICAN ARTISAN.

F. M. Borden & Bro., Philadelphia, Pa., are distributing a beautifully printed catalogue, illustrating the line of stoves and ranges which are manufactured for them under their own name plates. The catalogue is in loose leaf form so that any new pages that may be mailed to the trade, from time to time, describing new goods that are added to the company's line, may be easily inserted therein. All the goods shown in the catalogue are sold at net prices, thus enabling the dealer to determine the cost at once without resorting to lists and discounts, a feature which will appeal to the average busy dealer. F. M. Borden & Bro. believe that the stoves and ranges shown in their new catalogue are among the finest now on the market.

The A. C. Barler Mfg. Company, 104-106 Lake St., Chicago, are distributing a very attractive little booklet illustrating and describing the Barler "Ideal" Oil Heaters. The Barler "Ideal" begins to radiate heat as soon as a match is applied. The flame can be turned up or down to give more or less heat, and it can be put out instantly when no longer needed. The cost is said to average less than one cent an hour. The "Ideal" Wick Stop prevents the flame from being turned up too high. With the Barler "Ideal" there is said to be no smoke or odor of oil. The patent double-top wick tube, and the perfect combustion, absolutely prevents smoke or odor, it is claimed. Barler "Ideal" Oil Heaters burn a clean, white, hot flame.

The Black Silk Stove Polish Works, Sterling, Ill., are distributing a folder calling the attention of the trade to the merits of "Black Silk" Stove Polish. "We know," say the company, "that our polish is different from the ordinary stove polish, as it does not rub off or dust off as others do, and that a stove shined with 'Black Silk' will look better and remain bright more than four times as long as it will with ordinary stove polish." The Black Silk Stove Polish Works have recently been conducting an extensive advertising campaign in newspapers and elsewhere, in which the attention of housewives has been directed to the merits of this well-known polish. When writing the Black Silk Stove Polish Works, kindly mention THE AMERICAN ARTISAN.

Louis Fey, who conducts an oyster and chop house at 19 East 5th St., Cincinnati, Ohio, is the inventor of an improved gas broiler upon which a patent was granted on June 1 of this year. In a circular which Mr. Fey has issued, this broiler is fully described and illustrated. The inventor says that it is the most perfect gas broiler on the market, that it broils with less gas, and in one-third the usual time, and makes a uniform heat. All kinds of fat meats can be broiled without interfering with the burners or flame. An ingenious yet simple arrangement of hoods or shields prevents grease or other drippings from clogging the burners, and the flames cross each other underneath the meat. Provision is also made whereby the drippings of juice or grease are saved, being carried off between the flames into a pan. The broilers can be made in any width from 12 to 48 inches, and any depth to suit the requirements of hotels, restaurants, or for family use.

DICKEY PLANISHED SHEET STEEL.

The No. 27 Dickey Planished sheet steel, manufactured by the Ward-Dickey Steel Co., Indiana Harbor, Ind., possesses a number of features which have been the means of rendering this steel very popular. Tests that have been made from time to time, the manufac-

turers assert, have proved the capacity of this steel to withstand intense heat. The fact that it is guaranteed not to break is another important feature. Dickey Planished sheet steel has the imported Russia iron finish, and will, it is said, hold its color under the most severe tests. Descriptive literature may be had upon request. When writing, kindly mention THE AMERICAN ARTISAN.

REPAIRS FOR ANY STOVE.

Forshaw of St. Louis, 111 North 12th Street, St. Louis, Mo., advise the trade that they are prepared to furnish "repairs for any old stove". They have recently added at least 500 new patterns of water fronts and water backs and are constantly putting in more, as fast as new stoves and ranges are put on the market. They keep a full line of stove, range and furnace repairs and stove dealers' supplies. Forshaw has been in business continuously in the city of St. Louis for about 35 years, having drifted into the repair business from that of stoves and ranges. They are intimately acquainted with all the different stoves and ranges in use in the section of the country in which they are located, which aids greatly in the correct filling of repair orders. They claim to keep the most complete line of water fronts in the Western country. They now have ready for distribution a catalogue of water fronts and water backs, and they call the attention of the trade to the fact that they are carrying a very large line of these goods. All water fronts are of their own manufacture. Everyone is subjected to a pressure test of 150 pounds to the square inch. They are said to be made of the best pig iron, in a first-class manner. When writing Forshaw of St. Louis, kindly mention THE AMERICAN ARTISAN.

COLE'S ORIGINAL HOT-BLAST HEATER.

The Cole Manufacturing Company, 3218-3238 S. Western Ave., Chicago, say that Cole's Original Hot-Blast Heater is sold on a guarantee that cannot be made on many other heating stoves manufactured. The company's guarantee to every purchaser of a Cole's Original Hot-Blast includes the following: A saving of one-third in fuel over any lower draft stove of the same size, with soft or slack coal or lignite; the use of less hard coal for heating a given space by Cole's Hot-Blast Heater than any base burner made with the same sized fire-pot; that this stove will heat the rooms from one to two hours each morning with the soft or hard coal put into the stove the evening before; that Cole's Original Hot-Blast Heater will hold fire with soft coal from Saturday night until Monday morning; that a uniform heat can be had day and night with soft coal, hard coal or lignite; that the stove will remain absolutely air-tight as long as used; and that the feed-door is and will remain smoke and dust-proof. All the company ask is that the stove be operated according to directions and set up with a good flue. The Cole Manufacturing Company request the trade to write for their catalogue showing their money-making line of stoves and ranges, which include Cole's Original Patented Hot-Blast Heaters; Cole's Original Patented Air-Tight Wood Heaters; Cole's Patented Radiant Magazine Hard Coal Heaters; Cole's Patented Hot-Blast Ranges; and Cole's Patented Hot-Blast "Hi-Oven" Ranges, etc., all of which are sold to one dealer only in each town. When writing, kindly mention THE AMERICAN ARTISAN.

THE CHAMPION STEEL RANGE COMPANY RECEIVE HIGHEST AWARD AT PACIFIC EXPOSITION.

The Champion Steel Range Company, Cleveland, Ohio, announce that they have just received the highest award—gold medal—at the Alaska-Yukon-Pacific Exposition at Seattle, Wash., on their Champion Interchangeable Gas and Coal Range, shown in the accompanying illustration. This same range was also exhibited at the Dominion Exposition or Queen's Jubilee Anniversary at Victoria, B. C., and received

Champion Interchangeable Gas and Coal Range Which Won Highest Award—Gold Medal—at the Seattle Fair.

the highest award there. With it gas, coal, or wood can be used, or gas and coal at the same time. The breakfast can be cooked with gas, while the fire is being built in the fire-box. It is a high-grade steel gas range which in three seconds can be changed to a coal or wood range. Its most essential features are: The ease and rapidity with which food can be cooked, economy in the use of fuel while food is being cooked, durability, safety when using gas as a fuel, its heating properties so that the room may be properly warmed in winter, and its ability to properly and quickly cook the food in the summer time and yet not heat the kitchen. The body of the range on the outside is made of No. 18 Wellsville polished steel, on the inside is another thickness of steel, and between the two is a lining of heavy asbestos mill-board. The warming oven is exactly the same as is used on the high-grade steel ranges. The manufacturers claim that the Champion Interchangeable Gas and Coal Range will outlast the ordinary gas range at least three to one. The company will be pleased to quote prices upon request. When writing, kindly mention THE AMERICAN ARTISAN.

The Hardware Record.

THE AMERICAN ARTISAN AND HARDWARE RECORD is the only publication containing western hardware and metal prices corrected weekly. You will find these on pages 42 to 47 inclusive.

The Johnston Hardware Co. has engaged in the wholesale and retail business in Rome, Ga., carrying shelf and heavy hardware, stoves, agricultural implements, etc.

The Mansfield Steel Wire Works Company, Mansfield, Ohio, has been incorporated with a capital stock of $10,000 by M. A. Blackburn, A. Kallmeter, Huntington Brown, Arthur Hughes and Peter A. Biddinger.

The Hatcher Refrigerator Company, Chicago, Ill., has been incorporated with a capital stock of $3,000 to manufacture refrigerators. W. S. Johnson, 655 First National Bank Bldg., Chicago, is one of the organizers.

A disastrous fire on the afternoon of September 29 completely destroyed the warehouse of J. H. Robbins & Son, wholesale hardware dealers of Selma, Ala. The total loss is about $15,000. The building was 60 feet long by 120 feet deep.

Lewis C. Grover, former president of Colt's Patent Firearms Manufacturing Company, Hartford, Conn., died recently in that city. He was sixty years of age. Since January last he had been chairman of the board of directors of the company.

The Young Specialty Company, New York City, has been incorporated with a capital stock of $5,000 to manufacture razor strops and razors. The incorporators are: Elmer I. Young, Montclair, N. J., Robert L. Ames, Chicago, Ill., and Wylie C. Margeson, New York City.

It is reported that a petition in bankruptcy has been filed against George B. Curtiss, a wholesale hardware dealer at 84 Chambers Street, New York City, by James S. Deuse, a creditor for $7,000 for goods sold him in the past two years. Elbert B. Hamlin has been appointed receiver, it is stated.

W. G. Sanborn of Rockford, Ill., has recently been granted a patent on a drill chuck, invented by him. This device is especially adapted to light drilling in manufacturing. Its novel feature is a device for locking the chuck, which permits of its operation without holding the drill spindle from turning.

At a recent meeting of the New York State Association of Hardware Jobbers, held at Wilbes-Barre, Pa., R. H. Treman of Treman, King & Company, Elmira, N. Y., was elected president of the organization. The other officers are: Vice-president, H. M. Darby of the J. M. Warren Company, Troy, N. Y.; secretary, William Booth of the Irving D. Booth Company, Elmira, N. Y.

E. A. Foy & Co., 405-411 East 8th St., Cincinnati, Ohio, invite correspondence with those who desire their buildings fitted with lightning rods by a competent reliable agent. If the address is sent to the company they will see to it that the right party is sent to do the work. E. A. Foy & Co. state that they sell lightning rods that are approved by the Mutual Fire Insurance Companies and by the State Fire Marshals throughout the country.

Sylvanus Bourne, head of the Bourne-Knowles Mfg. Co., Cleveland, Ohio, manufacturers of nuts and washers, committed suicide by shooting on September 30. He was 62 years of age. For some time past the deceased suffered from ill health, which, it is believed, impaired his mind. Besides his connection with the Bourne-Knowles Mfg. Co., Mr. Bourne had been treasurer of the Van Waggoner & Williams Hardware Co. and also treasurer of the Fulton Foundry Co. A widow and two sons survive him.

M. E. Smith, President of the hardware firm of W. I. Saffell Company, Urbana, Ill., committed suicide on October 2 by shooting himself in the head, no cause being assigned for the act. He was about 45 years of age and went to Urbana from Clinton, Ill., about 16 years ago, entering into business with W. I. Saffell. On the retirement of Mr. Saffell some years ago, Mr. Smith assumed the control of the business. For a number of years the deceased was Secretary of the Urbana Commercial Club. He is survived by a wife and three children.

The Globe Manufacturing Company of Perry, Iowa, who built a large brick factory last year, are having an unusual success with their new line of washing machines since Mr. H. C. Modlin, the-vice-president, has assumed the management of the company. They have placed several new lines of washing machines on the market. In addition to the "Quicker Yet," they have a light running machine which they call the "Pride of Perry"; they also have two lines of washing machines with water motor, one, the "Beaver," is a cylinder motor for high pressure, and they also make the "Hylo," which has a water motor for low pressure, especially adapted for small towns. To meet the demands for their increasing business they are now doubling their capacity by erecting a three-story brick building, 50x100 feet.

Arthur J. Scott, Marine City, Mich., Secretary of The Michigan Retail Hardware Association, is distributing a circular describing an advertising contest to be conducted by the association during the coming year. Sixty dollars in gold will be awarded for the eight best advertisements submitted by members of the association during the next year. The contest will be divided into four sections. A first prize of $10 in gold and a second prize of $5 in gold will be awarded to the members who submit the best retail hardware advertisements for the fall, holiday, spring and summer seasons. The fall contest will close on November 30, 1909, and advertisements intended to attract fall business must be published in a newspaper by that date. Holiday advertisements must be published by January 30, 1910, spring advertisements by May 30, 1910, and summer advertisements by July 31, 1910. Contestants are required to send a marked copy of the paper in which their advertisement appears to Secretary Scott at the address given above, who, in the meantime, will be pleased to furnish full particulars regarding the contest.

EN ROUTE TO ATLANTIC CITY.

"Pop" (W. H.) Bennett, who will have charge of the "Hardware Special" which will leave the LaSalle Street Station, Chicago, at 2:45 p. m. on Monday, October 11, over the Lake Shore & Michigan Southern Railway, for Atlantic City, N. J., where the joint conventions of the American Hardware Manufacturers' Association and the National Hardware Association will be held on October 13, 14 and 15, advises that the list of persons who will travel thereon is about complete. The list is as follows:

F. C. Ayers, Boston, Mass.; C. M. Avery, Chicago, Ill.; C. K. Anderson, Chicago, Ill.; W. H. Bennett, Chicago, Ill.; E. N. Birge, St. Louis, Mo.; Mrs. E. N. Birge, St. Louis, Mo.; J. G. Bauer, Topeka, Kans.; Mrs. J. G. Bauer, Topeka, Kans.; Geo. W. Korn, Little Valley, N. Y.; Frank Baackes, Chicago, Ill.; G. W. Carter, Geneva, Ohio; F. E. Cutler, Waterloo, Iowa; Frank Calladay, Hutchison, Kans.; Mrs. Frank Calladay, Hutchison, Kans.; Thomas Calfay, Hutchison, Kans.; C. D. Clark, Peoria, Ill.; M. L. Corey, Argos, Ind.; O. L. Davis, Columbus, Ohio; Mrs. O. L. Davis, Columbus, Ohio; W. J. Donohue, Chicago, Ill.; W. D. Ellsworth, Chicago, Ill.; J. C. Fritchie, Salina, Kans.; Mrs. J. C. Fritchie, Salina, Kans.; F. D. Ford, Chicago, Ill.; Wm. H. Foege, Chicago, Ill.; Mrs. W. H. Foege, Chicago, Ill.; W. T. Gormley, Chicago, Ill.; Frank Gould, Philadelphia, Pa.; W. M. Glass, Omaha, Neb.; Mrs. W. M. Glass, Omaha, Neb.; H. W. Geller, St. Louis, Mo.; N. A. Gladding, Indianapolis, Ind.; Mrs. N. A. Gladding, Indianapolis, Ind.; D. B. Gann, Chicago, Ill.; Mrs. D. B. Gann, Chicago, Ill.; Geo. B. Godfrey, Detroit, Mich.; E. A. Hoffman, Los Angeles, Cal.; Mrs. E. A. Hoffman, Los Angeles, Cal.; C. M. Hurst, Decatur, Ill.; E. T. Harris, Chicago, Ill.; Mrs. E. T. Harris, Chicago, Ill.; J. C. Henry, Cleveland, Ohio; Mrs. J. C. Henry, Cleveland, Ohio; Palmer W. Holmes, Chicago, Ill.; C. H. Hall, Kansas City, Mo.; Mrs. C. H. Hall, Kansas City, Mo.; R. B. Jones, Clyde, Ohio; Mrs. R. B. Jones, Clyde, Ohio; Chas. T. Johnson, Canal Dover, Ohio; Chas. H. Johnson, Chicago, Ill.; S. H. Jones, Burlington, Iowa; Louis Kuehn, Milwaukee, Wis.; E. M. Kemp, Chicago, Ill.; Mrs. E. M. Kemp, Chicago, Ill.; E. H. Leutkemeyer, Cleveland, Ohio; H. D. Lee, Salina, Kans.; Jas. Ludes, Chicago, Ill.; I. W. Love, St. Louis, Mo.; F. H. Luthe, Des Moines, Iowa; D. A. Merriman, Chicago, Ill.; Mrs. D. A. Merriman, Chicago, Ill.; Miss McMaster, Chicago, Ill.; H. L. McNamara, Janesville, Wis.; D. O. Macquarrie, Chicago, Ill.; Warren McArthur, Chicago, Ill.; Warren McArthur, Jr., Chicago, Ill.; E. W. Morley, Saginaw, Mich.; G. W. Morley, Saginaw, Mich.; Wm. Oddie, Cleveland, Ohio; C. C. Philbrick, Grand Rapids, Mich.; Mrs. C. C. Philbrick, Grand Rapids, Mich.; F. C. Peters, Ft. Wayne, Ind.; A. A. Ainsworth, Chicago, Ill.; W. K. Pratt, Chicago, Ill.; J. T. Rowntree, Los Angeles, Cal.; J. A. Roberts, Chicago, Ill.; Mrs. J. A. Roberts, Chicago, Ill.; W. G. Ross, Cleveland, Ohio; Mrs. W. G. Ross, Cleveland, Ohio; J. E. Stone, New Britain, Conn.; Daniel Stern, Chicago, Ill.; W. C. Stephens, Chicago, Ill.; Ned Swift, Chicago, Ill.; L. C. Staples, Salina, Kans.; Mrs. L. C. Staples, Salina, Kans.; E. Warren Smith, Pike Station, N. H.; D .W. Simpson, Aurora, Ill.; J. B. Silliman, Atchison, Kans.; W. L. Sanford, Chicago, Ill.; Miss Sanford, Chicago, Ill.; Rudolph Tenk, Quincy, Ill.; Mrs. Rudolph Tenk, Quincy, Ill.; H. A. Taylor, Chicago, Ill.; Mrs. H. A. Taylor, Chicago, Ill.; A. W. Tredway, Dubuque, Iowa; Mrs. A. W. Tredway, Dubuque, Iowa; T. J. Usher, Chicago, Ill.; Mrs. T. J. Usher, Chicago, Ill.; C. H. Williams, Streator, Ill.; Mrs. C. H. Williams, Streator, Ill.; J. A. Warner, St. Joseph, Mo.; Geo. W. Wills, Duluth, Minn.; C. A. Peck, Berlin, Wis.; W. S. and Mrs. Brown, Des Moines, Iowa; H. J. Yoder, Syracuse, N. Y.; J. W. Black, Syracuse, N. Y.; H. A. Jones, Syracuse, N. Y.

At the Thursday morning (October 14) session of the Convention of the American Hardware Manufacturers' Association, R. E. Shanahan, Secretary and General Manager, Bissell Carpet Sweeper Company, Grand Rapids, Mich., will deliver an address on "Price Maintenance." At the joint session of the Manufacturers' and Jobbers' Associations which will be held on Thursday afternoon, October 14, George H. Maxwell, American Homecroft Society, 2008 Calumet Ave., Chicago, will speak upon the question "Shall the Nation Endure?" Following Mr. Maxwell's address, P. B. Noyes, Oneida Community Limited, Oneida, N. Y., will speak on "A New View of Jobbers' Special Brands", following which it is expected that the Jobbers and Manufacturers will enter into a general discussion of special brands.

The annual banquet in connection with the conventions will be held at the Hotel Marlborough-Blenheim, Atlantic City, on Thursday evening, October 14. It will take the form of a testimonial dinner to Dr. Frederick A. Cook, the discoverer of the North Pole. The price of tickets for this banquet will be $7.00 for each participant, lady or gentleman. Requests for tickets which must be accompanied by check for same should be addressed to E. C. Griswold, Corbin Cabinet Lock Co., 6th and Arch Sts., Philadelphia, who will have charge of the seating arrangements for the dinner. F. D. Mitchell, Secretary-Treasurer of the American Hardware Manufacturers' Association, advises that as it is anticipated that the demand for dinner tickets will exceed the seating capacity, seats will be assigned in the order in which the requests accompanied by checks are received by Mr. Griswold.

CARPET SWEEPERS OF THE STREATOR METAL STAMPING COMPANY.

The Streator Metal Stamping Company, Streator, Ill., manufacture a complete line of steel carpet sweepers, under the brands "Sterling" and "Streator." These sweepers are made entirely of cold rolled drawn sheet steel and they are credited with possessing the

"Sterling" Steel Carpet Sweeper.

handsomest finish ever shown in carpet sweeper construction. The bail of the cold rolled steel rod is brazed into the handle ferrule. A steel screw fastened in the wooden handle with a pin locked ferrule prevents the splitting of the handle. The case ends being made of steel allows the sweeper to clean closer to the wall than with the old style construction. The independent dumping dust pan is made of heavy tin and opens full. Then there is an anti-clogging end cap which prevents refuse from coming into contact with the working parts. The anti-tipping device does away with the tipping of the sweeper when it is drawn back quickly. All the working parts are protected from dust. With their "Sterling" and "Streator" carpet sweepers The Streator Metal Stamping Company issue a guarantee in which they agree at any time to make good by repair or replacement any part or parts of these carpet sweepers that will show any defect in material or workmanship; provided that such defect is not caused by misuse or neglect on the part of the purchaser. The company request the trade to write for illustrated catalogue. When writing, kindly mention THE AMERICAN ARTISAN.

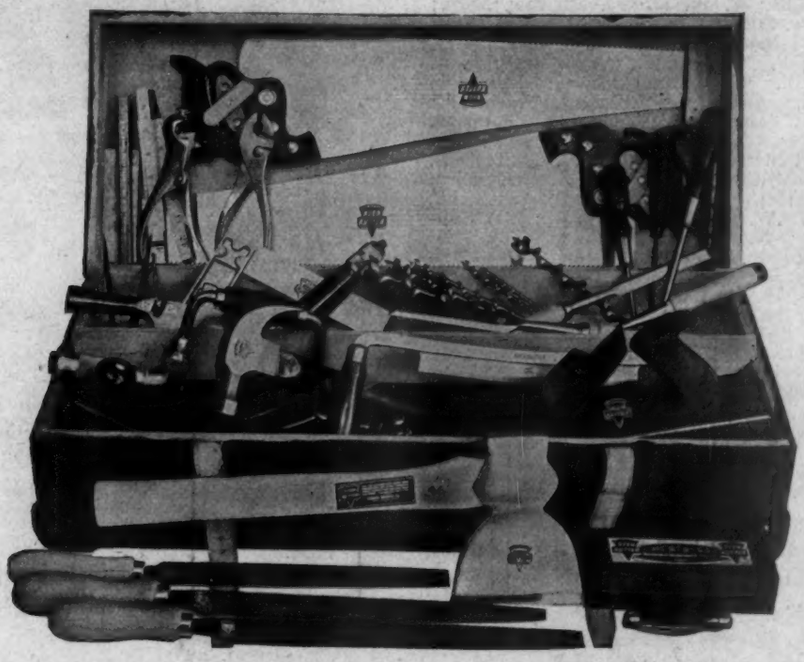
A U. M. C.-REMINGTON WINDOW TRIM FOR 1909.

The Union Metallic Cartridge Company, Bridgeport, Conn., are offering dealers a very attractive window trim for 1909, shown in the accompanying illustration. "No way to get by this big salesman right in your window," is the way that the company speak of its value as a trade getter. The company are distributing a circular giving directions as to how the display is to be set up. The white lines in the illustration show how the trim has been cut into sections. With the trim an abundance of stickers is furnished whereby it may be fastened to the glass on the inside. The complete display is made to fit a window 10 feet wide. The three pieces, mountain sheep, panel with guns, and picture of deer, together with the ducks, will exactly fit a window six feet wide. The trim should be fastened high enough in the window to give plenty of space to display the goods. It will be sent free to any dealer who will use it a month. When writing for full particulars, kindly mention THE AMERICAN ARTISAN.

U-M-C—Remington Window Trim.

"KEEN KUTTER" TOOLS TAKEN BY PEARY TO THE NORTH POLE.

When Commander Peary sailed on the steamer Roosevelt for the North Pole, he took with him a chest of "Keen Kutter" Tools of the Simmons Hardware Company, St. Louis, Mo. The tool chest is shown in the accompanying illustration. The outfit



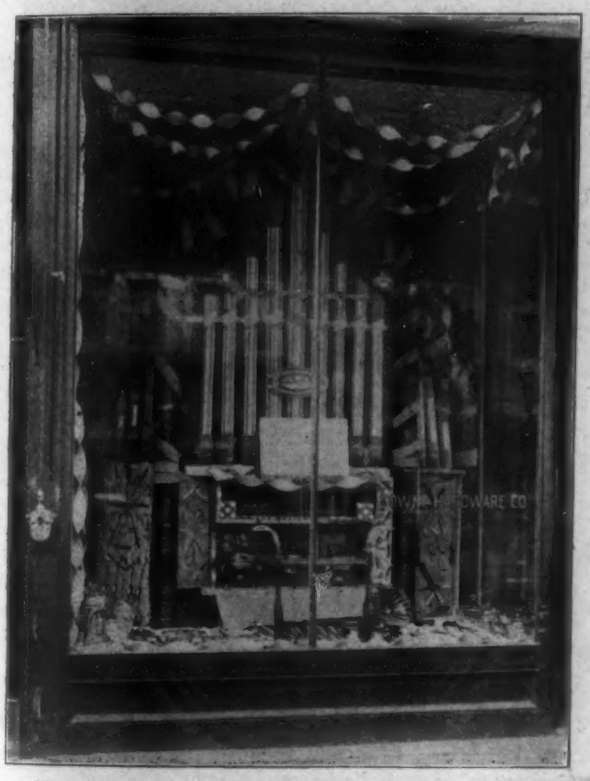
Chest Containing "Keen Kutter" Tools Used by Peary on His Trip to the Top of the World.

comprised the following articles of "Keen Kutter" hardware:

"Keen Kutter" Rip Saw No. 88R—26 inch; Panel Saw No. 88—20 inch; Nail Hammer No. K511½; Bench Hatchet No. KNB2; Screw Driver No. 50—6 inch; Screw Driver No. 50—4 inch; Chisel No. SB—¼ inch; Chisel No. SB—½ inch; Chisel No. SB—1 inch; Awl and Tool Set No. 50; Plane No. KJ; Plane No. KS; Drawing Knife—8 inch; Bit Brace No. KR10; Auger Bit No. KS—4/16 inch; Auger Bit No. KS—6/16 inch; Auger Bit No. KS—8/16 inch; Auger Bit No. KS—10/16 inch; Auger Bit No. KS—12/16 inch; Auger Bit No. KS—16/16 inch; Drill Bit No. K109—4/32 inch; Drill Bit No. K109—6/32 inch; Try Square No. 220—6 inch; Flat Wood Rasps—12 inch—with Handle; Half Round Bastard—12 inch—with Handle; Mill Bastard—10 inch—with Handle; 3 Special Slim Taper Files 5 inch and 1 Handle; Plier No. 160; Oil Stone No. KM6; Spoke Shave No. KK90; 1 Saw Set No. 120; 1 Zig Zag Rule No. 503; 1 E. C. S. Carpenter Lead Pencil No. 107; Pocket Knife No. K73878.

A CHURCH ORGAN BUILT OF HARDWARE.

Among the window displays of hardware entered in THE AMERICAN ARTISAN'S 1909 Hardware Window Display Competition which received Honorable Men-



Honorably Mentioned by the Judges in THE AMERICAN ARTISAN'S 1909 Hardware Window Display Competition—Submitted by J. Blaine Towne, with the Towne Hardware Company, 430-432 Broadway, Saratoga Springs, N. Y.

tion from the judges of the contest, was one submitted by J. Blaine Towne, with the Towne Hardware Company, 430-432 Broadway, Saratoga Springs, N. Y.

As illustrated, it represented a church organ constructed from hardware. Everything used in building it was merchandise sold in the company's store. For the outline 13 lengths of pipe and 16 elbows were used. Between the upright pillars was placed a warming oven taken from a steel range and which formed the key-board cabinet. The keys were represented by black and white handled knives arranged in order. Long adze handles and dark colored hammer handles formed the pedals. The seat of the organ consisted of a pair of andirons with a bathtub seat fastened across the tops. The panels were filled in with different kinds of cutlery and silverware. The mirror was a nickel-plated bread tray. In front of the organ merchandise was arranged so as to display it to the best advantage.

This display proved to be such a drawing card that the company just about doubled their business on fancy goods while it was exhibited. It was so popular with church people that the company were asked to put the window in again.

TRADE OPINIONS ON "FAIRPLAY'S" GRIEVANCE.

From Chandler & Barber, Jobbers and Retailers, 122-126 Summer Street, Boston.

"In reply to the communication of the 25th regarding the making of cheap trimmings to exact design and style of the better class, would say that we do not believe this to be a good policy, and with the line of goods which we carry, it has been very rarely done and in the one or two cases where it has been done to meet a demand by some large customers, we have personally made objection to the manufacturers. Generally speaking, we should presume that no reputable manufacturers would willingly get out a line of goods of cheap grade that will interfere with their higher grade, for obvious reasons. At any rate, we think that this is not a good thing for the dealer, who should try to sell the best class of goods."

From Kelley-How-Thomson Co., Wholesale Hardware, Duluth, Minn.

"We presume that your correspondent refers to such designs as the Russell & Erwin Mfg. Co.'s "Randolph" and "Manhattan" designs, which have been so largely reproduced in wrought bronze and in some cases in steel. These splendid designs make a fine appearance in cast bronze and undoubtedly some consumers might be made to believe that the designs are exclusive. It would seem to the writer, however, that when a customer gets down fine enough to want an exclusive design he might be willing to have dies made to produce something special and then have the dies destroyed.

"After all is said and done, artistic hardware is a commercial proposition, and if the manufacturer does not produce his own expensive designs in wrought bronze and steel, some other manufacturer will, and the result is the same at the end."

From T. W. Dixon, Charlotte, N. C., Secretary The Retail Hardware Association of the Carolinas.

"I have read with much interest the communication of 'Fairplay,' in a late issue of your paper, and I must say that the evil he complains of is a real and not an imaginary one. The writer recalls an incident in his career as a traveling salesman of several years ago, by which he lost a valuable customer, on account of said customer being quoted plated goods, after his order had been taken for the genuine bronze. This was shortly after the plated goods were first put on the market, and our customer could never be convinced that there was any difference. As the goods were for his own dwelling, we can imagine that he sees the difference by this time.

"This is a case in which it is very easy to see the unfairness, and to see that the manufacturer is not giving the trade a 'square deal'; but it is quite a different proposition to suggest a remedy. Even the manufacturers must recognize the difficulty, but in this strenuous age, when competition is so fierce, they are not quick to correct the most glaring impositions. It would seem to me that our friend might get some relief through his State Hardware Association, as our local association is doing a good work in this section, along this very line. We make it a point to get in close touch with the jobber and manufacturer, and by united and concerted action through the National Hardware Association, we are generally able to accomplish our ends, especially when we show the justice of our position. Our trade papers are also

helping us a great deal by giving us the use of their columns, in what is called the 'Question Box,' and in this way, we are able to get some very valuable suggestions on the many knotty problems that very often confront the hardware man. From my personal experience, the hardware business seems to have more perplexing features connected with it than you can possibly find in any other.

"After all, it is the overcoming of obstacles that develops strength and manhood, and in this particular, the hardware business offers a very wide field of endeavor. To follow the line of least resistance may seem attractive to some, but that has never been the method of those who have made names for themselves in the mercantile world.

"With best wishes for the success of your enterprising journal."

OBITUARY.

J. D. Warren.

John D. Warren, president of the J. D. Warren Manufacturing Company, Chicago, manufacturers of hardware store equipment, and one of the most widely known men in the trade, died on Sunday, September 26, at the Chicago Athletic Club, Chicago, where he made his home. For several months past he had not been enjoying good health and as a result it was necessary for him to absent himself from business considerably. Mr. Warren was born at Oakfield, N. Y., on July 17, 1848, and was a graduate of Lima (Ohio) Seminary. For about fifteen years he was connected with Pratt & Company, Buffalo, N. Y., and was a traveling salesman for the Simmons Hardware Company, St. Louis, Mo. The "Warren System," originated by him on the formation of the J. D. Warren Manufacturing Company, soon attained widespread popularity among the hardware trade, and Warren Hardware Store Equipment and Fixtures are today widely known throughout the United States. The deceased was a man of marked business ability and of untiring energy, and the success of the company of which he was the head can very largely be attributed to his great activities. Mr. Warren was a man who made many friends and retained them. His death will be deeply regretted by the trade throughout the United States. Interment took place at Oakfield, N. Y., the deceased's birthplace. The business of the J. D. Warren Manufacturing Co. will be continued without interruption under the capable management and direction of Henry Caple, who has been vice-president of the company.

J. D. Warren.

William Baur.

The death of William Baur of the firm of Hoffmann & Baur, Milwaukee, Wis., which occurred on Friday evening, October 1, has robbed the Milwaukee Local Master Sheet Metal Workers' Association of one of its most loyal supporters. Mr. Baur was born on March 15, 1863, in Milwaukee, Wis. He learned the sheet metal trade with his partner, Louis Hoffmann, and with him commenced business on March 1, 1884, under the firm name of Hoffmann & Baur. Through industry and ability they acquired a prominent standing and built up a large business which is well known throughout the Northwest. The funeral services were held October 4.

RETAIL HARDWARE DOINGS.

NEW FIRMS AND CORPORATIONS.

Rockport, Mass.—Ralph T. Parker has opened a hardware store here.

Madison, Neb.—J. A. Pence & Son have engaged in the hardware business.

Cairo, Ill.—A stock of shelf hardware, window glass, paints and oils will be added to the regular lines of the Cairo Lumber Company.

Elloree, S. C.—The Arthur Hardware Company, Inc., have opened a hardware store here.

Duluth, Minn.—L. H. Jones will erect a hardware store and is desirous of obtaining catalogues of anything which may be necessary for the equipment of a modern hardware establishment.

BUSINESS CHANGES.

Tower City, Pa.—The Reiley Bressler Hardware Store has been sold to Walter Henry.

Meriden, Kan.—Charles Brown has purchased the Warner Hardware Company's business.

Marvin, S. D.—The hardware business of Arvidson & Lafstedt has been sold to Ramsey & Stohl.

Shelby, Mich.—O. J. Morse has taken over the hardware business of the McKinnon Hardware Company.

Blairsburg, Iowa.—The Blairsburg Hardware Company, J. P. Talcott, proprietor, have purchased the hardware business of A. R. Titus.

Harrisburg, Ore.—Hill & Co. are successors to Hill & Chisley in the hardware business.

La Valle, Wis.—Greenhalgh & Son have been succeeded by the La Valle Hardware Company, which is incorporated and capitalized at $10,000.

Dorchester, Wis.—O. A. Peterson has purchased the hardware store of Fred Gutwasser.

MISCELLANEOUS.

Walnut, Ill.—Fire destroyed W. J. Fisher's hardware store.

Ft. Smith, Ark.—The new building of the Speer Hardware Company on Rogers Avenue is progressing rapidly.

Lebanon, Ore.—Samuel Labbet & Son will erect a new building for their hardware business.

Pryor, Ore.—The store of Samuel Bros. Hardware Company, recently destroyed by fire, is being rebuilt.

Greenville, Ala.—The store of the J. H. Dunklin Hardware Company was destroyed by fire September 27.

Freeport, Ill.—Fire damaged the hardware store of Genant & Luedeking.

Billings, Mont.—The hardware department of Yegan Bros. was damaged by fire.

Perry, Ohio.—Fire destroyed Orcutt's hardware store Sept. 28.

Advertising Department

Our readers are invited to send in copies of their advertisements in the local press for criticism. All communications should be addressed to the "Advertising Department" of THE AMERICAN ARTISAN.

The advertisement of Jos. B. Rabe of Saginaw, Mich., which appeared in the *Saginaw Courier-Herald* of recent date, occupying a 2½-inch space, two

KEEP COOL
BY USING
THE IDEAL GAS RANGES
They are BEST and MOST ECONOMICAL. Ask others who have them. Latest improved stove in the market.
A FULL LINE OF ALL GAS SUPPLIES
I Make Quick Gas Connections.
JOS. B. RABE,
[illegible] Genesee, opposite Jeffers Park. Both Phones.

columns wide, is a creditable one, though there is rather too much large bold-face type which tends to crowd it, and render the smaller type insignificant. The ad. is well written and Mr. Rabe is to be commended for the line drawing attention to the fact that he "makes quick gas connections," a very important matter and one which should appeal to all users of gas ranges.

* * *

Another retail advertiser who knows his business is D. P. Comtois of Willimantic, Conn., as this advertisement of his which is here reproduced will demon-

D. P. COMTOIS

The First
ENAMELED STOVE
in America
ON EXHIBITION IN OUR WINDOW
No More Blacking of Stove

The enamel is burned on the iron at a temperature of 1,400 degrees Fahrenheit. It is "heat-proof" and "rust-proof" and requires no polishing. All the cleaning and dusting required can be done very easily with a damp rag.

For many years, in fact since cast iron stoves and ranges have been known and made, the expense and labor involved in blacking them, have been a factor of no small concern and consideration to the frugal and cleanly house-wife.

It has always been our custom to introduce new and original features in stoves, of a practical and desirable character, to which those using our stoves can readily attest.

However the enameling of stoves is so manifestly desirable, serviceable and practical that it will be paramount to all other features of general utility.

D. P. COMTOIS,
814 Main Street, Willimantic, Conn.

strate. He has told a good story in the way it should be told to attract attention, and has used a cut that shows up well on the kind of paper used by the *Chronicle* of Willimantic. Very few retail advertisers pay any attention to the fact that line cuts are about the only ones that will show up to good advantage on the paper stock used by most newspapers. D. P. Comtois would do well to see that the proofs of his advertisements are better read, as it is a shame to mar as good an advertisement as this is with the bad type seen in the fifth line in the word "window," and in the ninth line. The mis-spelling of the word "stoves" in the sixth from the last line is also unfortunate. The firm name at the top is unnecessary, as is also the use of at least five different type faces. The announcement occupied 6½ inches of space, two columns wide.

* * *

The Foster-Mead Hardware Company of Huntington, W. Va., will have to improve their advertising materially before they can expect to realize very satis-

Iron Fence
Lawn Seats,
Lawn Vases,
Statuary

for Lawns and Cemeteries Call in and let us show you our catalogs.

We can also supply your needs in Lawn Mowers, Grass Hooks, Grass Shears, Hedge Shears and all other lawn working tools.

Foster-Mead Hardwear Company.

factory returns from it. The example reproduced herewith contains very little to recommend it, but there are a number of features which deserve criticism. The first is the broken down type used in the first line. Another thing that could have been avoided by the proofreader is the ridiculous mistake made in the spelling of "hardware" in the firm name. There is no excuse for anything of this kind going through, and the advertiser has reason to complain very strenuously to any newspaper which will allow his announcements to be shown with such a gross error in so prominent a place. It is difficult to figure out any reason for the discontinuance of the surrounding border at the top of the ad. This announcement occupied 5 inches of space in the *Huntington* (W. Va.) *Herald Despatch*.

Heating and Ventilating

UNDERFEED FURNACES OF THE SPRAGUE FOUNDRY AND MFG. CO.

The Sprague Foundry & Mfg. Company, Council Bluffs, Iowa, report that they are enjoying a very successful season's business with their "Sprague" and "Western" Underfeed Furnaces, a type of which is

Newest Type of Underfeed Furnace.

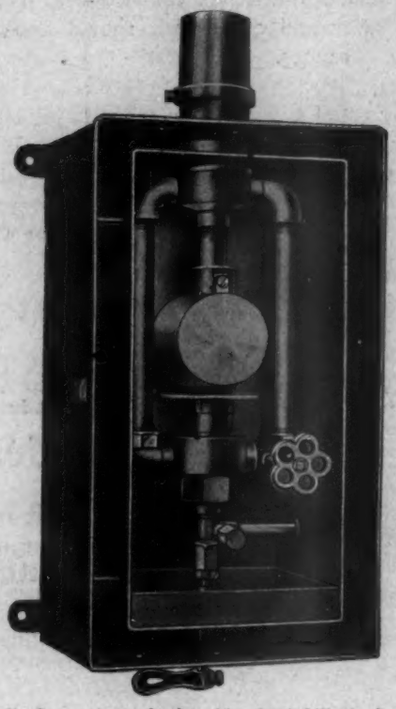
here illustrated. These furnaces are fed from below and make a saving in fuel cost which, the manufacturers say, is not possible with many other furnaces. They are constructed of the best materials and are said to be perfect in operation and to give absolute satisfaction. There are other advantages set out in the company's new catalogue which will be mailed to the trade upon request. When writing, kindly mention THE AMERICAN ARTISAN.

GASOLENE LIGHTING AND THE STANDARD-GILLETT COMPANY OF CHICAGO.

The evolution of gasolene lighting is interesting and it is only within the last few years that it has reached its present high state of efficiency and economy in operation. Gasolene lighting began with the torch or flare, commonly seen around the circus, used by the street faker and at the fruit stand. The burner did not have a mantle and the light (what little there was of it) was simply the result of partially vaporized gasolene burning in the open air. Quality of light considered it was the most expensive mode of producing light from gasolene. The next form of gasolene lighting apparatus to be introduced was the Carbureter system, or cold process system, and many styles of this particular type have been made, all of which produce a very good light, but highly expensive. Closely following the Carbureter came the Gravity lamps, these lamps consisting of a reservoir usually holding from one to three quarts of gasolene and a main feed pipe leading downward to the generator. This style of gasolene lamp was troublesome in that each lamp had to be filled separately and frequently. The Gravity lamp was followed by the Individual Pressure lamp, which increased the candlepower.

The inconvenience of filling each lamp separately and then pumping it up to 40 or 50 pounds pressure, together with the danger of having the supply of gasolene so near the burner, soon caused the use of this style of lamp to be discontinued. About this time the Central Generator system appeared, which lessened the inconvenience of filling so many pressure lamps and which up to the present time has been found a very desirable system for store lighting. There is only one style of a Central Generator System recognized and permitted by the National Board of Fire Underwriters, this being the one with the generator attached to the wall inside the building and which is supplied with gasolene through a hollow wire from a tank located on the outside of the building.

The best exponent of this method of gasolene lighting is said to be the "Simplicity" Generator System, manufactured by the Standard-Gillett Company, 10 West Michigan St., Chicago. This company has devoted a great deal of time, forethought and attention to the construction of such a system and now have on the market a system which for simplicity, durability and economy in operation cannot be excelled, it is said. This system enables the merchant in the small town who is without lighting facilities, to in-

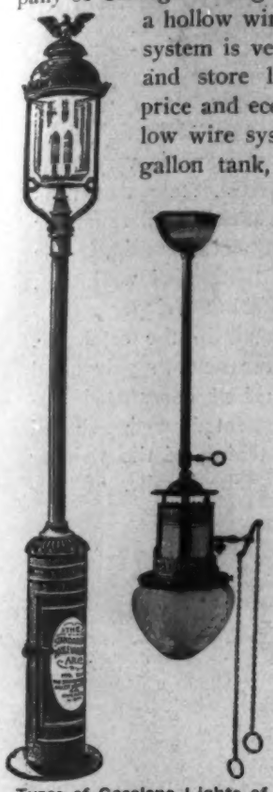


"Simplicity" Generator of the Standard-Gillett Company of Chicago.

stall a lighting plant, thus giving him all the advantages offered by the city lighting plant and at a saving of about 50 per cent. The Standard-Gillett Company know of such a system installed in a store 25x80 feet, at an initial cost of less than $100, the monthly cost of operation being about $4. The Central Generator System is very popular for store lighting and a great number of merchants even in the large cities have installed it, claiming a great saving in light bills, a better quality and more light, and the independence of not being at the mercy of the local light company.

It remained, however, for the Standard-Gillett Com-

pany of Chicago to originate and place on the market a hollow wire low pressure system. This system is very popular for residence, hall and store lighting and is moderate in price and economical in operation. A hollow wire system consists of a five or 10-gallon tank, a foot pump, small flexible hollow wire tubing for carrying the gasolene from the tank to the fixtures, and the fixtures themselves. Any burner or any fixture may be burned or turned out at will without in any way affecting the others. The lamps used with this system are very attractive and in general form imitate the best types of electric arcs and incandescents. All this has been made possible by the recent introduction of the inverted mantle.



Types of Gasolene Lights of the Standard-Gillett Company.

One of the latest ideas in gasolene lighting is the New Boulevard Arc light with an automatic cut-off, another offering of the Standard-Gillett Company. This light is a high candlepower street light and has an ingenious and patented contrivance for extinguishing the light at any given time by means of a clock arrangement located in the base of the lamp. This light is claimed to meet a long-felt want of the small town and village without lighting facilities and is moderate in price. When writing the Standard-Gillett Company, 10 West Michigan St., Chicago, kindly mention THE AMERICAN ARTISAN.

THE "WEIR" ALL-STEEL FURNACE.

The Meyer Furnace Co., Peoria, Ill., are distributing a folder containing "practical common sense reasons why the 'Weir' all-steel gas and soot-consuming furnace should be used for heating the home in preference to steam or hot water." This furnace is said to be very responsive to draft and a large volume of warm air can always be quickly supplied. The amount of heat required can easily be regulated. The manufacturers state that the "Weir" seldom requires repairing, and if repairs are necessary they can be made in a short time. The only parts that can burn out are the lining and grates through carelessness, and these can be repaired through the doors without disturbing the furnace. The "Weir" furnace has a large radiating surface and is of massive boiler-like construction. The Meyer Furnace Co. say positively that it consumes all the gases and soot and that its operation is perfect. When writing for catalogue, kindly mention THE AMERICAN ARTISAN.

PARAGRAPHS.

The L. Kruckemeyer Company, Cincinnati, Ohio, manufacturers of furnaces, has had its charter amended by the increase of its capital stock from $26,000 to $50,000.

The Backus Heater Sales Company, Boston, Mass., dealers in furnaces and heating appliances, has been incorporated with a capital stock of $30,000. The incorporators are: Henry F. Cottle, Dorchester, Mass., and William G. Burns, Boston, Mass.

The Excelsior Steel Furnace Co., 38-44 West Monroe Street, Chicago, have gotten up order blanks for furnacemen by the use of which shipments can be made promptly and correctly. All of the company's fittings are mentioned on the blank so that all that is necessary is to fill in the number of each fitting.

The New York & New Jersey Furnace Company, Cranford, N. J., has been incorporated with a capital stock of $100,000 to manufacture furnaces, steam boilers, etc. The incorporators are: George H. Bates, Cranford, N. J.; Daniel H. Chinery, Port Richmond, N. Y., and John M. Braisted, also of Port Richmond.

The Ideal Manufacturing Company, Detroit, Mich., and Windsor, Canada, are distributing a four-page pamphlet illustrating and describing the "Ideal Triplex" Copper Coil Water Heater, which, they say, is a distinct "Ideal" advance in copper coil construction. The special feature of this water heater is that the "Triplex" circulator around which the copper coils are wound, consists of a cast brass hollow chamber, which acts as a "baffle plate" by throwing additional heat to the coils, and being hollow and a direct water way, (unlike the solid cast iron cone found in the ordinary heater) the "Triplex" chamber is really a water heater in itself. The company claims that exhaustive tests show that this combination of the "Ideal Triplex" attains a much higher efficiency, for the gas consumed, than any other coil heater on the market. This pamphlet also contains other interesting matter concerning this water heater.

Mrs. Frances A. W. McIntosh, 939 Real Estate Trust Building, Philadelphia, Pa., wishes to acquaint the trade with the fact that she is now ready to prepare catalogues, folders, advertising and follow-up systems, and to plan and execute promotion work. Mrs. McIntosh was formerly advertising manager for the Buffalo Forge Company and associate companies of Buffalo, N. Y., and was for six years engaged in a similar capacity with the Standard Tool Company of Cleveland, Ohio. She has had a very wide experience in advertising and is fully competent to prepare advertising literature of any description.

INUNDATED WITH ANSWERS.

TO THE AMERICAN ARTISAN:

Please discontinue my advertisement for "Position Wanted," as I have had all kinds of offers, and from 14 states, about 60 letters in all.

E. M. TRUE.

Severance, Kansas, August 18, 1909.

There is nothing else which will fix a floating life and prevent it from being tossed hither and thither like forming a habit of prompt decision.

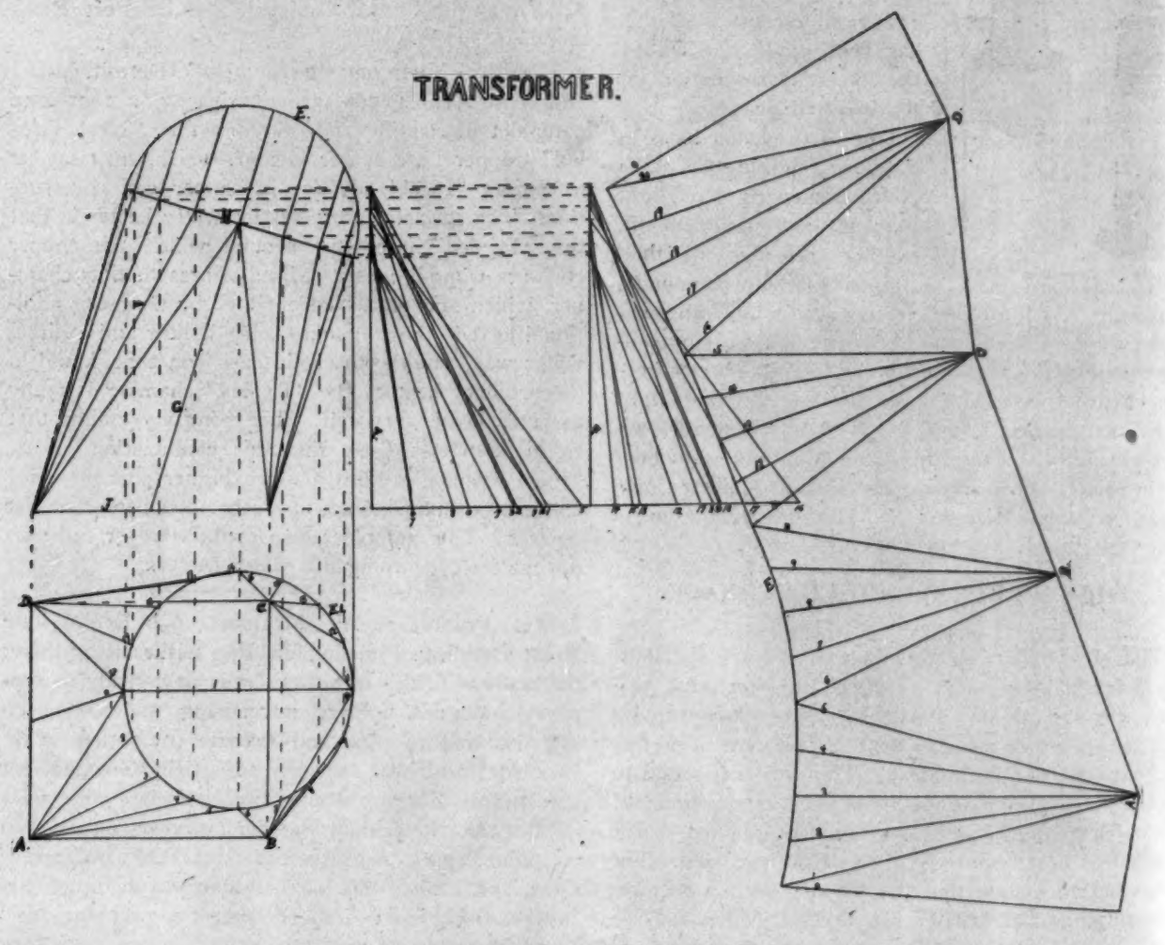
Tinshop

THE PUBLISHER IS PLEASED TO ANNOUNCE THAT THE AMERICAN ARTISAN WILL BE SENT FREE OF CHARGE FOR THE REMAINDER OF 1909 TO NEW SUBSCRIBERS FOR THE YEAR 1910. YEARLY SUBSCRIPTIONS SENT NOW WILL BE CREDITED TO THE END OF THE YEAR 1910.

TRANSFORMER.

BY G. L. GRAY.

To draw pattern for transformer at an angle and the round end at one side, draw *A, B, C, D,* as size of square end; then draw elevation. Draw line *J* as base line, and center line *G* at angle desired, at right angles to line *C*. Draw line *H;* then draw circle *E* the size desired. Space circle equally and carry points to line *H;* then drop these points to plan, as shown by dotted lines. Draw line *I* the distance wanted for offset; then take the distance of spaces between points on circle *E* and line *H,* and set the same from line *I* onto dotted lines; then draw through these points giving circle *E1;* then, from points in circle *E1* draw lines to corners, as shown. Number each line as shown. Then draw triangles. The points on line *H* must be carried to top of triangles, as shown by dotted lines. Each line must be drawn to its proper point to get the true length of each line.



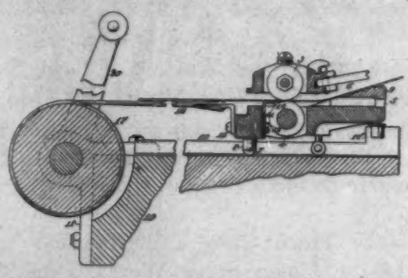
CATALOGUE OF THE ATLANTIC STAMPING COMPANY.

The catalogue of the Atlantic Stamping Co., Rochester, N. Y., manufacturers of "Atlantic" high-grade tin, copper and galvanized ware, is very complete. The Atlantic Stamping Co. state that it is their desire that the name "Atlantic" shall stand for all that is best in material and workmanship, in the future as it has in the past. "Atlantic" wash-tubs, galvanized striped, with and without wringer attachment, are the first articles listed in the catalogue. These wash-tubs are made from smooth galvanized sheets, with double seamed, raised corrugated bottom. The company's new patented wedge-shaped wringer attachment makes fastening of the wringer easy and prevents pulling off. The handles of "Atlantic" wash-tubs are heavy and are securely riveted on with the company's double reinforced handle clips. "Atlantic" galvanized pails have double riveted ears with double reinforcements. They are heavily wired around the top. The Atlantic Stamping Co. pay special attention to the making of "Atlantic" wash boilers, that they be all of standard length and circumference, from a 14-inch full weight sheet. They are introducing the wide seams on all boilers, making them very much stiffer and stronger on the ends where the lifting strain comes. The company are also introducing a new seamless cover which they say is superior to anything that they have ever before

produced. This cover is light and strong and is said always to fit perfectly. The weight, strength and finish of the "Atlantic" dairy pail are said to be unsurpassed by any pail of equal price now on the market. It is heavily wired around the top and has double-seamed raised bottom. The double reinforcement of the ear is said to be a feature exclusive with the Atlantic Stamping Co. The company have added to their line a series of lightweight pails in both tin and galvanized iron. These are of the same high grade as their other goods, but are made of lighter stock and are without the double ear reinforcement. When writing the Atlantic Stamping Co., kindly mention THE AMERICAN ARTISAN.

A NEW SHEET METAL SHEARS.

The accompanying illustration shows a new type of sheet metal shears, the invention of C. DeWitt Wagner, Cedar Rapids, Iowa, and upon which he was on September 28, granted a United States patent. Mr.

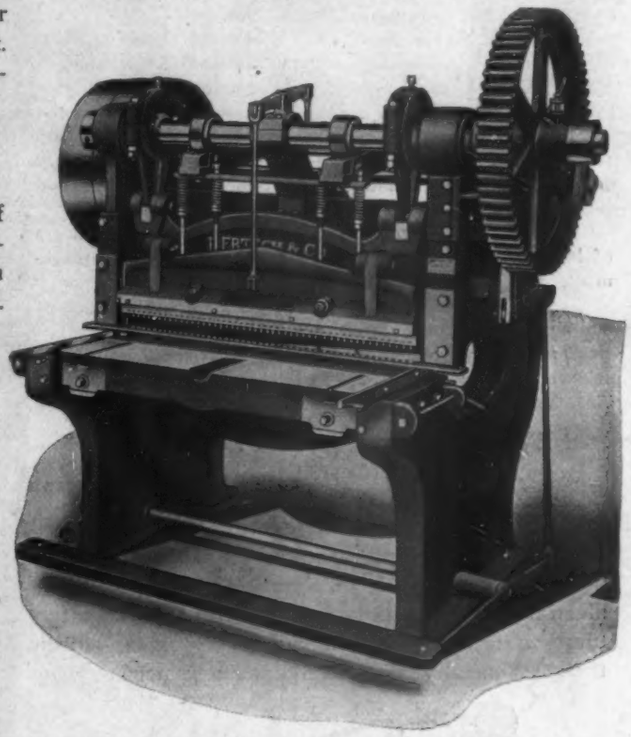


Sheet Metal Shears, the Invention of C. DeWitt Wagner, Cedar Rapids, Iowa.

Wagner made application for the patent on February 3 of this year. In the shears and in combination with upper and lower frames adapted to permit the sheet to pass through them at the rear, are a pair of rotary cutters mounted in the frames, supporting foot rollers thereunder, a pair of guide rollers near the front end, a pair of guide rollers at the back end set higher than the forward pair, and a guide to be straddled by the rollers. The guide is provided at one end with an upward extension, or auxiliary short guide. The number of Mr. Wagner's patent is 935,072.

A PATENTED COMBINED SQUARING SHEAR AND MULTIPLE PUNCH.

The accompanying illustration shows a Patented Combined Squaring Shear and Multiple Punch, with the punch-cross-head in position for punching a series of holes simultaneously with the shearing stroke of the shear-cross-head, that has been put on the market by Bertsch & Co., Cambridge City, Ind. It trims or slits and punches a series of holes in one operation. The distance from the center of the punches to the cutting edge of the blade varies from ½ inch to 5 inches, according to specifications. The punches have either independent or universal adjustment. For universal adjustment they are set in an adjustable, dovetailed, steel punch-holder-bar, so that the entire lot can be removed or replaced, together. When engaged, the punching cross-head is securely locked and has a square-shoulder-fit along the entire length of the shear-cross-head, against which all of the stress results, thus relieving the hinge pins of any strain; it has also end bearings. The vertical rods with which the machine is provided, serve as a hold-down when the machine is used as a plain shear, and as a stripper when it is used as a combined shear and multiple punch. The number and location of these rods depends entirely upon the character of the work to be done on the machine. They are actuated by a bar in the rear of the punch-cross-head. For some kinds of work, a solid bar, the full length of the machine,



Combined Squaring Shear and Multiple Punch of Bertsch & Company, Cambridge City, Indiana.

is fastened to the ends of these rods. Bertsch & Company will build these machines in all required sizes, from 3 feet to 12 feet in length. When writing for further particulars and prices, kindly mention THE AMERICAN ARTISAN.

MEMORIAL RESOLUTIONS ADOPTED BY THE MASTER SHEET METAL WORKERS' ASSOCIATION OF MILWAUKEE.

At the monthly meeting of the Master Sheet Metal Workers' Association of Milwaukee, Wis., held on October 5, the following memorial resolutions were unanimously adopted. As will be observed, they relate to the death of two of the association's most prominent members, George P. Schmitt and William Baur.

GEO. P. SCHMITT.

Whereas, It has pleased Almighty God, in His infinite wisdom, to remove from among us, our beloved Member, Friend and Associate, Geo. P. Schmitt, who departed this life at 3 o'clock on the morning of September 16th, 1909 and

Whereas, In his death, the Milwaukee Master Sheet Metal Workers' Association and the National Association of Master Sheet Metal Workers, have sustained an irreparable loss, therefore

Be It Resolved, That we commend to his fellow-members for emulation his fortitude and patience, during a very busy and arduous life, his modesty, kindliness, forbearance and judgment, and

Be It Further Resolved, That we extend to the members of his family our heartfelt sympathy in a common bereavement, and

That These Resolutions Be Spread upon the minutes of our next convention and

That a Copy Be furnished the *Master Sheet Metal Workers' Journal, The Metal Worker*, and THE AMERICAN ARTISAN.

WM. BAUR.

Whereas, It has pleased Almighty God, in His infinite wisdom, to remove from among us our beloved Member, Friend and Associate, Wm. Baur, who departed this life at 5 o'clock on the morning of Oct. 1, 1909 and

Whereas, In his death, the Milwaukee Master Sheet Metal Workers' Association and the National Association of Master Sheet Metal Workers, have sustained an irreparable loss, therefore

Be It Resolved, That we commend to his fellow-members for emulation his fortitude and patience, during a very busy and arduous life, his modesty, kindliness, forbearance and judgment, and

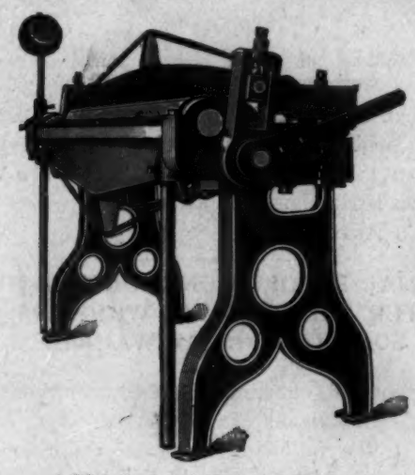
Be It Further Resolved, That we extend to the members of his family our heartfelt sympathy in a common bereavement, and

That These Resolutions Be spread upon the minutes of our next convention and

That a Copy Be furnished the *Master Sheet Metal Workers' Journal, The Metal Worker* and THE AMERICAN ARTISAN.

NEW BRAKE OF THE J. M. ROBINSON MFG. CO.

The J. M. Robinson Mfg. Company, 3282-3288 Spring Grove Avenue, Cincinnati, Ohio, have put on the market a 4-foot brake, shown in the accompanying illustration. Its capacity is 12 gauge. The manufacturers state that it is being used very extensively by the sheet metal working trade and that it has always



4-Foot Brake of 12-Gauge Capacity.

given very satisfactory results. It is very substantially constructed and its ease of operation has caused it to become very popular with sheet metal workers. Full particulars and prices will be furnished upon application. When writing, kindly mention THE AMERICAN ARTISAN.

NOTES AND QUERIES.

THE ENAMELING OF IRON PANS.

From N. J. Evert, 315 Sheridan Rd., Waukegan, Ill.

Please give me the names of firms in Chicago who enamel iron pans.

Ans.—Jukes & Shafer, 201 S. Desplaines St.; Chicago Japanning and Enameling Plant, 96 Clybourn Ave.; Standard Japanning Co., 265 S. Jefferson St., Chicago.

"BEAVER" STOCKS AND DIES.

From W. A. Shaw, Rockefeller, Ill.

Will you please give me the name of a wholesale firm which sells "Beaver" stocks and dies for threading gas pipe?

Ans.—Kellogg-Mackay Company, 19 W. 18th St., Chicago.

LOW-PRICED STOVES.

From Fisher & Reynolds, Cassopolis, Mich.

Kindly advise us where we can purchase a line of stoves such as are sold by Chicago department stores.

Ans.—Chicago Stove Works, Chicago, Ill.; Belleville Stove & Range Co., Belleville, Ill.; Co-operative Foundry Co., Rochester, N. Y., and 505 South Clinton St., Chicago, Ill.; Danville Stove & Mfg. Co., Danville, Pa.; Foster Stove Co., Ironton, Ohio; Galusha Stove Co., Rochester, N. Y.; Germer Stove Co., Erie, Pa.; Ohio Stove Company, Portsmouth, Ohio; Quality Stove & Range Co., Belleville, Ill.; South Erie Iron Works, Erie, Pa.; Stove & Range Co. of Pittsburgh, Pittsburgh, Pa.; Wm. G. Willard, St. Louis, Mo.; Albany Foundry Co., Albany, N. Y.

ADDRESS OF THE FINCH STOVE COMPANY.

From A. H. Wallace & Son, Algonac, Mich.

Please give us the address of the Finch Stove Company.

Ans.—The Finch Stove Company has been succeeded by the Union Stove Works, Peekskill, New York.

THE FARQUHAR FURNACE.

From E. B. Lohr, Estherville, Ia.

Please give me the name and address of the firm making the Farquhar Furnace.

Ans.—Farquhar Furnace Co., Wilmington, Ohio.

ITEMS.

Two additions are being added to the plant of The Dover Stamping & Manufacturing Company, Cambridge, Mass. These will materially increase the output of the company.

A communication has been received by an American consul in Latin-America from a local business man, who desires to get into touch with manufacturers of corrugated iron, zinc roofing and barb wire. The address may be obtained by writing the Bureau of Manufactures, Washington, D. C., and referring to File No. 3919.

GOT THE TINNERS HE WANTED.

To THE AMERICAN ARTISAN:—

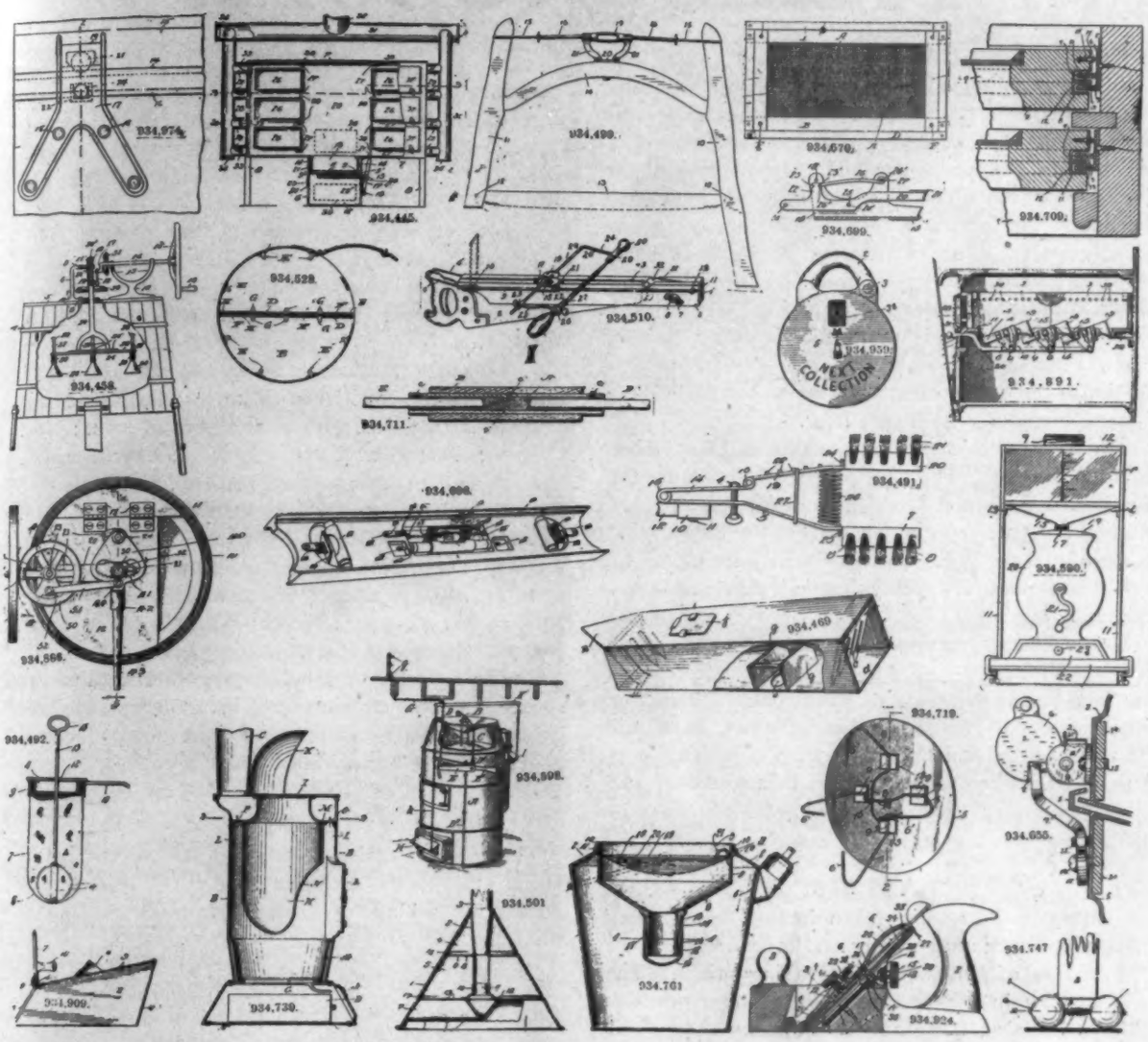
Please accept thanks for my advertisement in THE AMERICAN ARTISAN for two tinners, which brought results.

W. H. DUNN.

Pasadena, California, Sept. 23, 1909.

When you get into a tight place and everything goes against you till it seems you could not hold on a minute longer, never give up then, for that's just the place and time at which the tide'll turn.

NEW PATENTS.



934,445—Stove. Frank S. Lang, Seattle, Wash. Filed Aug. 27, 1908. Serial No. 450,565.

934,458—Washing-Machine. Allen S. Nero, Bottineau, N. D. Filed March 19, 1909. Serial No. 484,556.

934,469—Animal-Trap. Charles H. Shoup, Corbin, Kans. Filed Nov. 18, 1908. Serial 463,142.

934,491—Stovepipe-Cleaner. George J. Weyth, Armour, S. D. Filed April 21, 1909. Serial 491,213.

934,492—Sifter. Mary C. Williams, Bedford, Ky., assignor of one-half to Edmonia Farley, Bethlehem, Ind. Filed July 9, 1908. Serial No. 442,717.

934,499—Bucksaw. Henry L. Bornman, Indianapolis, Ind., assignor to E. C. Atkins & Company, Indianapolis, Ind., a Corporation of Indiana. Filed Jan. 14, 1909. Serial No. 472,235.

934,501—Clothes-Washer. Albert A. Brooks and Fred D. Crooker, Kansas City, Kans. Filed Jan. 18, 1909. Serial No. 472,990.

934,510—Saw-Filing Device. Edward F. Edwards, Chicago, Ill. Filed May 23, 1908. Serial No. 434,576.

934,528—Washing-Machine. William W. Hoehnen, Milwaukee, Wis. Filed Dec. 21, 1908. Serial No. 468,546.

934,570—Screen. Caroline A. Ranney, Winn, Me. Filed June 22, 1906. Serial No. 322,834.

934,590—Coffee-Grinder. Ivan E. Brandrick, Ardsley, N. Y. Filed May 28, 1909. Serial No. 498,799.

934,598—Heat-Regulator. Milton J. Farquhar, Wilmington, Ohio. Filed Nov. 16, 1906. Serial No. 343,744.

934,655—Gravity Sash-Lock. Frederick Bogenberger, Milwaukee, Wis. Filed Nov. 28, 1908. Serial No. 464,858.

934,699—Animal-Trap. David W. Solomon, McMurray, Wash. Filed June 12, 1908. Serial No. 438,119.

934,698—Mirror for Spirit-Levels. Christopher A. Seibert, Sandyville, Ohio. Filed April 16, 1909. Serial No. 490,286.

934,709—Weather-Strip. Charles A. Blohm and Clarence H. Chamberlin, Milwaukee, Wis., assignors to Federal Metal Weather Strip Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed Feb. 15, 1909. Serial No. 477,858.

934,711—Soldering Device. Frank S. Chapman, Kenton, Ohio. Filed Oct. 16, 1908. Serial No. 457,976.

934,719—Flue-Stopper. George B. Edwards, Mendota, Ill. Filed Jan. 8, 1909. Serial No. 471,274.

934,739—Stove. Frands Madsen, Wilbur, Wash. Filed April 6, 1909. Serial No. 488,190.

934,747—Door-Holder. William W. McNaughton, Newark, N. J. Filed May 6, 1908. Serial No. 431,087.

934,761—Milk-Pail. Elbridge C. Sargent, Amenia, N. D. Filed March 2, 1909. Serial No. 480,845.

934,886—Gearing for Washing-Machines. Andrew A. Clausen, Chicago, Ill. Filed Jan. 11, 1907. Serial No. 351,827.

934,891—Stove. Charles S. Davis, Oakland, Md. Filed April 19, 1909. Serial No. 490,783.

934,909—Dust-Pan. John Gugora and Charles D. Flamm. North Braddock, Pa. Filed March 30, 1909. Serial No. 486,693.

934,924—Bench-Plane. Joel Lund, San Francisco, Cal. Filed March 12, 1908. Serial No. 420,612.

934,959—Combination Mail-Box Lock and Collection-Indicator. Newton E. Crow, Nashville, Tenn. Filed March 2, 1907. Serial No. 360,264. Renewed July 17, 1909. Serial No. 508,146.

934,974—Door-Hanger. Morris E. Kanaly, Arlington, Mass.; Francis M. Kanaly executor of said Morris E. Kanaly, deceased. Filed Nov. 19, 1907. Serial No. 402,789.

Trade Report.

HARDWARE.

Business continues to be very fair in the hardware trade. Prices are still firm. Moderate sales were made during the week, the character and extent of which were practically unchanged from those of the week preceding. There is naturally an improving demand in the fall trade, certain lines now being seasonably active. Most of the purchasing is to cover immediate needs and buyers are showing little disposition to anticipate later requirements. General sentiment in the trade is optimistic, it being believed that the expansion in the iron and steel trades and the improvement in other lines will be reflected in a better demand for hardware later.

The base price of wire nails at the mill for jobbers is $1.80 per keg. The base price is $1.85 at the mill for full carloads and $2 at the mill for less than carloads. The base price of cut nails at the mill for jobbers is $1.90 per keg. The base price is $1.95 for full carloads at the mill, and $2 for less than carloads at the mill.

In the Chicago market wire nails are quoted as follows: Wire nails, jobbers' car lots, $2.03; retailers' car lots, $2.08; $2.15 out of store; painted barb wire, jobbers' car lots, $2.03; retailers' car lots, $2.08, with 30 cents for galvanizing; plain wire to jobbers in car lots, $2.03, and to retailers in car lots, $2.08.

Copper slating nails are quoted at 21 cents a pound net.

TIN PLATE.

Orders are now being taken for first quarter business from the manufacturing and consuming trade by the makers of tin plate at prevailing prices. They will soon begin to take care of the jobbers' needs for this period also. The outputs of many of the mills have been sold well into December and most new business accepted at present must necessarily be for delivery in the first quarter. Following the recent advance of $2 a ton in tin plate a similar advance has been posted in terne plate. The American Sheet & Tin Plate Co. is operating about 72 per cent of its serviceable capacity and the independents are for the most part very busy. For 100-lb. I. C. coke plates, 14x20, the price is $3.50 to $3.65, Pittsburgh, subject to a rebate of 5 cents per box on large orders. Quotations are as follows:

American coke tins I. C., from store, New York.	
Bessemer steel, 100 lbs., 14x20	$4.05@4.10
Bessemer steel, 95 lbs., 14x20	3.95@4.00
Bessemer steel, 90 lbs., 14x20	3.85@3.90
Am. Charcoal, terne, 8-lb. coating:	
Worcester grades, 14x20, 107 lbs	4.15@4.20
Worcester grades, 14x20, 100 lbs	4.00@4.05
Worcester grades, 20x28, 200 ibs	7.85@7.95
For prompt shipment, f. o. b. mill:	
Coke, tins, 14x20, I. C	3.70@3.75
Coke, tins, 14x20, 100 lbs	3.55@3.60
Coke, tins, 14x20, 95 lbs	3.50@3.55
Coke, tins, 14x20, 90 lbs	3.45@3.50
Charcoal, terne, 20x28, I. C	7.15@7.20
Charcoal, terne, 20x28, 200 lbs	6.85@6.90

Usual differences for odd sizes and weights.

SHEETS.

Business continues to be good in sheets, some very large orders being recorded. A general advance of $1 per square has been made in corrugated sheets. Sales for first quarter delivery are being made at current prices to the consuming trade. Prices to jobbers have not yet been determined by the makers. The American Sheet & Tin Plate Co. is operating about 82 per cent of total capacity. The following are Pittsburgh prices: Blue annealed sheets, Nos. 3 to 8, 1.65c; Nos. 9 to 10, 1.70c; Nos. 11 and 12, 1.75c; Nos. 13 and 14, 1.80c; Nos. 15 and 16, 1.90c; box annealed sheets, Nos. 10 to 12, 1.95c; Nos. 13 and 14, 2.00c to 2.05c; Nos. 15 and 16, 2.05c to 2.10c; Nos. 17 to 21, 2.10c to 2.15c; Nos. 22 to 24, 2.15c to 2.20c; Nos. 25 and 26, 2.20c to 2.25c; No. 27, 2.25c to 2.30c; No. 28, 2.30c to 2.35c; No. 29, 2.35c to 2.40c; No. 30, 2.45c to 2.50c; galvanized sheets, Nos. 13 and 14, 2.35c to 2.40c; Nos. 15 and 16, 2.45c to 2.50c; Nos. 17 to 21, 2.55c to 2.60c; Nos. 22 to 24, 2.70c to 2.75c; Nos. 25 and 26, 2.90c to 2.95c; No. 27, 3.10c to 3.15c; No. 28, 3.30c to 3.35c; No. 29, 3.45c to 3.50c; No. 30, 3.70c to 3.75c; painted roofing sheets, $1.60 per square for No. 28 gage, 2½-inch corrugation, and galvanized roofing sheets, $2.85 per square No. 28 gage, 2½-inch corrugation.

COPPER.

There is an easier feeling in the copper market largely due to the decline abroad. The leading producers are asking 13¼c for electrolytic and 13½c for Lake, but trade is quiet.

Extreme fluctuations for this year:

	Highest.	Lowest.
Lake	14.55	12.55
Electrolytic	14.25	12.12½
Casting	14.12½	12.00
London, spot	£64 2 6	£54 12 6
London, future	64 17 6	55 10 0
London, best selected	67 15 0	59 0 0

SHEET ZINC.

Sheet zinc is quiet and unchanged. Prices are as follows: Cask lots, 7¾@8⅜c; less than cask lots, 8¾@9⅜c.

SPELTER.

There is a firm market for spelter, and prices are slightly higher, New York quoting 5.90@5.95c for spot and October. The Boston jobbing price is firm at 6¼@6⅜c. The London market is firm at £23 5s.

NICKEL.

Nickel is fairly active and steady. For large lots 40@48c is asked, while 50@60c is asked for less than ton lots.

ANTIMONY.

Antimony is dull and heavy, special brands being quoted at 8@8¼c and ordinary brands at 7¼@7½c.

ALUMINUM.

Aluminum is moderately active and unchanged. No 1 ingots for melting are offered at 24c per pound and No. 2 ingots at 23@25c in car lots for 90 per cent pure. Rods and wire are being held at 32c a pound and sheets at 34c a pound, all in ton lots.

TIN.

The London tin market has advanced very sharply during the past week, spot being £2 17s 6d higher and futures £2 15s higher. Thursday closing showed an advance of 15s on spot and 12s 6d on futures from the previous day at £140 12s 6d for spot and £141 12s 6d for futures. New York quotes pig tin at 30.80@31.00c, according to quantity and delivery. The Boston jobbing price is firm and higher at 31@31⅛c.

PIG LEAD.

Pig lead is still unchanged, the American Smelting & Refining Company quoting 4.40c New York or 4.45c Boston for lots for forward delivery. The St. Louis market is easier at 4.22½c. London quotes the market higher at £13 3s 9d.

PIG IRON.

The demand for pig iron is still very good. Large business was done in September and buyers seem to be pretty well satisfied for the time being. A good tonnage has been placed for 1910 delivery already and prices have been advanced all along the line. Steel making irons are still in the lead, though foundry iron is beginning to feel the effect of the better demand for basic and Bessemer grades. Stocks of iron at the furnaces are still large, owing to the tremendous production, though showing a decrease during September of nearly 33 per cent. The consumption has apparently more than kept pace with the production, a fact that speaks volumes for the healthy condition of the market. Prices have been further advanced, or at least have been firmly established.

In the Alabama field, many furnaces are out of the market altogether, and those that have any iron to sell are uniformly asking $15 ton for deliveries next year, and only one furnace is known to be willing to sell at less than that figure for the balance of this year.

Virginia iron is now firmly established on the basis of $16 ton for the balance of this year, with a premium of 25@50c ton for high silicon iron. Some sales of the latter have been made at $16.50 ton. Nothing is to be had at less than $16@16.25 ton for the first half of 1910. Northern irons are also firm, the established quotation for the balance of the year being $19@20 ton, with $20.25 ton being asked for the first quarter of 1910.

CHICAGO MARKET.

Lake Superior Charcoal	$19.50@20.00
Northern foundry No. 1	19.00@19.50
Northern foundry No. 2	18.50@19.00
Northern foundry No. 3	18.00@18.50
Southern foundry No. 1	19.85
Southern foundry No. 2	19.35
Southern foundry No. 3	18.10
Southern foundry No. 4	17.60
Southern No. 1 soft	19.85
Southern No. 2 soft	19.35

PITTSBURG MARKET.

Bessemer, valley	$18.00@18.50
Bessemer, Pittsburg	18.90@19.40
No. 2 foundry, Pittsburg	17.90@18.15
Gray forge, Pittsburg	16.90@17.15
Basic, valley	16.75@17.00
Basic, Pittsburg	17.65@17.90

BIRMINGHAM MARKET.

No. 1 foundry	$ 15.50
No. 2 foundry	15.00
No. 1 soft	15.50
No. 2 soft	15.00

Rogers, Brown & Co., Cincinnati, say in their weekly report:

"The week has seen no let-up in the demand for pig iron for all deliveries up to July 1st, 1910. It was a perfect reflection of the month before, the most active month in the pig iron market since the best days of 1907. Further advances have been registered on pig iron in various districts and this, in connection with great buying of finished products, makes the situation and outlook very strong. Advance in steel products brought out large purchases and rails with fabricated steel have been the leaders.

"It is claimed that the coming year will see the greatest development yet in trolley building and the consequent increased demand for such material. The best informed are also confident that next year will be the greatest in demand for railroad supplies of all kinds and that production in steel products will out-run any previous record.

"Consumers of pig iron outside of steel makers are believed to have contracted for over 600,000 tons during the month of September and in so doing have registered one of the largest month's tonnages in foundry iron that has ever been purchased.

"What records are available at this time for the business done in September would show that the monthly record of production in steel-making irons had been broken and it is more than likely that foundry grades followed suit. All grades are in good demand with a preference for the steel-making irons, of which there is a scarcity.

"Again attention is unmistakably directed to the great increase in consumptive capacity which has been made during the last two years. In spite of the great September record of production there was a decrease in furnace stocks, all of it practically going into current melt. It is undoubtedly true at this time that the percentage of consumption increase which will be available by the first of next year is greatly under estimated and only slightly conceived.

"Coke is stronger than ever with price advances, output in the Connellsville Region somewhat decreased and all interests working their hardest for an improvement in the tonnage. Labor is cutting a large figure and making a big difference in production. Prices are on the upward move and the volume of business is excellent.

Matthew Addy & Co., Cincinnati, say in their weekly report:

"The sudden awakening of the iron trade is an industrial spectacle of the first order. There are the faint hearted who say things are going too fast and there are the wild enthusiasts who insist that there are no limits to the expansion of business. The first fear a reaction. The second prophesy that Bessemer iron will be $30 before the middle of next year and that No. 2 foundry will be $25 f. o. b. Birmingham. The fact of the matter is pig iron has been going forward at an almost unprecedented rate, a rate which naturally cannot be kept up forever without causing trouble. Nothing could be more wholesome than for the trade to take a breathing spell and to allow developments to come a little more naturally and a little more normally. But for two years the country has been suffering from a serious under-consumption of iron and there is a great deal of lost ground to be made up in this direction, and this fact alone is sufficient to explain the suddenness of the revival in the iron trade and to give every promise of a long continuance of the present happy and prosperous conditions.

"There has not been as much buying this week as in the past, not because the market has been less, but because it has not been possible to secure the iron. The furnaces have sold up so solidly and so long ahead that they prefer now to keep out of the market for a season. In fact a great many of them have no more iron to sell.

"Prices are firm at $17 in the north for No. 2 and $15 at Birmingham. These are very fair prices, allowing both producers and consumers a fine margin of profit. There has been a good deal of talk of imported iron, but as yet this is all talk. No iron has actually been brought across the Atlantic."

Current Hardware and Metal Prices.

THE AMERICAN ARTISAN AND HARDWARE RECORD is the only publication containing western hardware and metal prices corrected weekly.

METALS.

FIRST QUALITY BRIGHT PLATES.

		Per Box.
IC	14x20	$6 40
IX	14x20	7 45
IXX	14x20	8 60
IXXX	14x20	9 85
IXXXX	14x20	11 00
IC	20x28	13 70
IX	20x28	15 70
IXX	20x28	18 15
IXXX	20x28	20 55
IXXXX	20x28	22 95

COKE PLATES.

Cokes, 180 lbs	IC	20x28	$ 8 50
Cokes, 200 lbs	IC	20x28	9 00
Cokes, 216 lbs	IC	20x28	9 50
Cokes, 270 lbs	IX	20x28	11 25

PIG IRON.

North'n Fdy., No. 1	$18 00@$18 50
North'n Fdy., No. 2	17 50@ 18 00
North'n Fdy., No. 3	17 00@ 17 50
Southern Fdy., No. 1	18 35
Southern Fdy, No. 2	17 85
Southern Fdy., No. 3	17 10
Southern Fdy., No. 4	16 60
Southern No. 1 Soft	17 85
Southern No. 2 Soft	17 35
Southern Gray Forge	15 85
Southern Mottled	15 60
Lake Sup. Charcoal	19 50@ 20 00
Southern Silveries, 4% Silicon	17 35@ 17 85
Southern Silveries, 5% Silicon	17 85@ 18 35
Southern Silveries, 6% Silicon	18 85@ 19 85
Jackson Co. Silveries, 6 per cent	19 90
Jackson Co. Silveries, 8 per cent	20 90
Jackson Co. Silveries, 10 per cent	21 90
Malleable Bessemer	17 00@ 17 50
Standard Bessemer	17 65@ 17 90
Alabama Basic	16 85@ 17 35

BLACK STEEL SHEETS.

No. 12	per 100 lbs.	$2 15@$2 25
No. 14	per 100 lbs.	2 20@ 2 30
No. 16	per 100 lbs.	2 30@ 2 40
Nos. 18-20	per 100 lbs.	2 50@ 2 55
Nos. 22-24	per 100 lbs.	2 55@ 2 60
No. 26	per 100 lbs.	2 60@ 2 65
No 27	per 100 lbs.	2 65@ 2 70
No 28	per 100 lbs.	2 75@ 2 80

GALVANIZED

No. 10	per 100 lbs.	$3 00@$3 10
Nos. 12-14	per 100 lbs.	3 00@ 3 10
No. 16	per 100 lbs.	3 00@ 3 10
Nos. 18-20	per 100 lbs.	3 05@ 3 15
Nos. 22-24	per 100 lbs.	3 20@ 3 25
No. 26	per 100 lbs.	3 40@ 3 45
No. 27	per 100 lbs.	3 60@ 3 65
No. 28	per 100 lbs.	3 80@ 3 90

POLISHED SHEET STEEL.

No. 24	per 100 lbs	$4 90
No. 26	per 100 lbs.	5 00
No. 27	per 100 lbs.	5 10
No. 28	per 100 lbs.	5 20

SMOOTH STEEL.

Wood's Smooth,	No. 20	$3 05
" "	No. 22-24	3 10
" "	No. 25-26	3 15
" "	No. 27	3 20
" "	No. 28	3 30

PATENT PLANISHED SHEET IRON.

Patent Planished Sheet Iron, "A" $10.20, "B" $9 20

PATENT PLANISHED SHEET STEEL.

Dickey Planished Sheet Steel 8½c

SOLDER.

XXX Guaranteed ½ & ½	per lb. 18 c
Commercial ½ & ½	per lb. 17½c
No. 1 Plumbers	15½c

SHEET ZINC.

500 lb. Casks	case, per cwt. $7 15
300 lb. Casks	per cwt. 7 15
Sheets	per cwt. 7 15

COPPER.

Copper sheet, 100 lbs. over, base 17c

TIN PIGS AND BARS.

Banca, pigs, per lb	29 c
Straights, pigs, per lb	29 c
Straights in bars, per lb	33 c

LEAD.

American Pig	4.37½@4.40
Bar	4.37½@4.40
National (White) brands (in less than 100 lb lots), per lb	8½c

Sheet.

Full coils	per 100 lbs. $9 00
Cut coils	per 100 lbs. 9 50

HARDWARE.

ADZES.

Carpenters'.
Plumbs 40%

Coopers'.
Barton's 15%
White's 15%

Railroad
Plumbs 40%

Ship.
Plumbs 40%
White's 15%

AMMUNITION.

Caps, Percussion—per 1,000.
F. L Waterproof, 1-10s 40c
G D 35c
Musket 60c

Shells, Loaded—
Loaded with Black Powder 40%
Loaded with Smokeless Powder, medium grade 40 & 5%
Loaded with Smokeless Powder, high grade 40 & 10 & 10%

Union Metallic Cartridge Co.:
New Club, Black Powders 40%
Nitro Club, Smokeless Powders, 40 & 5%
Arrow, Smokeless Powders 40 & 10 & 10%

Winchester:
Smokeless Repeater Grade 40 & 5%
Smokeless Leader Grade 40&10&10%
Black Powder 40%

Gun Wads—per 1,000.
Winchester Gun Wads 15%

Powder. Each.

DuPont's Sporting,	kegs	$5 50
" "	½ kegs	2 90
" "	¼ kegs	1 60
Dupont's Sm'k'less,	50-lb. drum	22 75
" "	25-lb. kegs	11 30
" "	12½-lb. kegs.	5 80
" "	6½-lb. kegs.	2 97
"	1-lb. cans	52

Shot.

Drop shot, sizes smaller than B, 25-lb. bags, per bag	1 95
Drop shot, B and larger sizes, 25-lb bags, per bag	2 20
Buck Shot, 25-lb. bags, per bag	2 20
Chilled Shot, 25-lb. bags, "	2 20

ANCHORS

Expansion Screw Anchors 10%

ANVILS

Trenton, 70 to 80 lbs	9½c per lb
Trenton, 81 to 150 lbs	9½c per lb

ASBESTOS.

Board and Paper 33⅓%

AUGURS.

Boring Machine 70%
Irwin's 40&10%
Carpenter's Nut 70%
Hollow.
Bonney's—list $30.00 75&5%
Stearns, No. 3 36 00
Post Hole.
Digwell, 8-inch per doz. 12.50
Iwan's Post Hole and Well 40%
Vaughan's, 4 to 9-in., per doz. 6 60
Rafting.
Snell's 50&5%
Ship.
Ford's, with or wi'out screw 40-10%
Snell's " " " 40-5%

AWLS.

Brad.
No. 3 Handled per doz. $0 40
No. 1050 Handled " 90
Shouldered, assorted, 1 to 4, per gro. $1 20
Patent asst'd, 1 to 4 " 85
Harness.
Common " 95
Patent " 90
Peg.
Shouldered " 1 50
Patent " 60
Scratch.
No 1 handled " 4 80
No. IS, socket handled per doz. 1 25
No. 7 Stanley 1 80
Sewing.
Common per gro. 90
Patent " 90

AXES.

Boy's Handled.
Lippincott, 3 lb. per doz. $6 00
Marshall Falls City " 5 50
Broad.
Plumbs, West, Pat 33⅓%
" Can. Pat 35%
" Firemen's (handled) per dos $19 00
Plumbs, Miners' (handled) " 9 00
Single Bitted (handled)
Blood's Champion $10 50
Blood's Dull Finished 9 00
Rough Rider 9 00
American 6 50
Perfect Premier, Forest Clipper 10 00
Duquesne 6 00
Single Bitted (without handles)
Blood's Champion $7 90
Blood's Dull Finish 8 00
Rough Rider 7 00
Electric Chopper 8 25
Duquesne 6 50
Crown 6 25
Double Bitted (without handles).
Blood's Champion, 3½ to 4½ lbs. per doz $10 00
Flint Edge " " 9 75
Perfect Premier " " 11 00
The above prices on axes of 3 to 4 lbs. are the base prices.
3½ to 4½ lbs. advance 25c
4 to 5 lbs. advance 50c.
4½ to 5½ lbs. advance 75c.

BAGS, PAPER NAIL.

Pounds	10	16	20	25
Per 1,000	$2.50	3.75	4.50	5.00

BALANCES, SPRING.

Frary's 40%
Pelouze 20%

BARS, CROW.

Pinch or Wedge Point per cwt. $3 75

BASKETS.

Clothes.
Small Willow per doz. $7 00
Medium " " 8 75
Large " " 10 50

Galvanized Iron.	½ bu.	1 bu.	1½ bu.
Per doz	$4 75	6 50	8 00

BEATERS.

Carpet. per doz.
No. 13 Tinned Spring Wire $0 90
No. 11 Spring Wire coppered 1 20
No. 10 Preston 1 10

Egg. Per doz.
No. 50 Imp. Dover $0 75
No. 102 " " tinned 85
No. 150 " " hotel 1 50
No. 10 Heavy hotel tinned 2 10
No. 13 " " " 3 30
No. 15 " " " 3 60
No. 18 " " " 4 50

BELLOWS.

Blacksmiths' 65%
Hand.
8-inch per doz. $5 50
10-inch " 10 50
Moulders'.
12-inch " 13 00

BELLS.

Call.
3-inch Nickeled Rotary Bell, Bronzed base per doz. $5 00
Cow.
High Grade 60%
Kentucky 65&10%
Door. Per doz.
New Departure Automatic $6 00
Rotary.
3 -in. Old Copper Bell 4 00
3 -in. Old Copper Bell, fancy 6 00
3 -in. Nickeled Steel Bell 4 50
3½-in. Nickeled Steel Bell 5 00
Hand.
Hand Bells, polished 40&10%
White Metal 40%
Nickel Plated 30%
Swiss 40&33⅓%
Silver Chime 33⅓%
Miscellaneous.
Church and School, steel alloy 60%

Farm, lbs	40	50	75	100
Each	$1.80	2.25	3.38	4.50

BEVELS, TEE

Stanley's, rosewood handle, new list	25%
Stanley's iron handle	25%

BINDING, OILCLOTH.

Zinc	80%
Brass	75%
Brass plated	75&5%

BITS.

Auger.
Extra Double Spur 70&10%
Ford's Car and Machine 40&10%
Ford's Ship 40&10%
Irwin 50%
Russell Jenning's 25&10%
Clark's Expansive 60%
Steer's " Small list, $22.00 25%
" " Large " $26.00 25%
Irwin Car 50%
Ford's Ship Auger pattern Car 40&10%
Center 25%
Countersink.

No. 18 Wheeler's	per doz.	$1 50
No. 20 "	"	2 25
American Snail head	"	1 00
" Rose "	"	1 00
" Flat	"	80
Mayhew's Flat	"	1 10
" Snail	"	1 25

Dowell
Russell Jennings 25&10%
Gimlet.
Standard Double Cut 60%

German Pattern	per doz.	$0 60
German	"	65
Gouge	"	80
Spoon	"	1 00
Countersink	"	1 20

Reamer.

Jenning's Square	"	2 50
Standard Square	"	1 20
German Octagon	"	75

Screw Driver.

No. 7 Common	"	50
No 1 Triumph	"	1 25

BLACKING, STOVE. (See Polish).

BLADES, SAW

Butchers'.
Standard, ⅞ & 1⅛-in.....40%
Clock Spring.....40%
Star.....15%
Coil.....each, $1 50

Hack.
Disston's.....25&5%
Flexible.....33⅓&5%
Star.....20&5%

Wood.
Jackson's.....per doz. $2 25
Disston's—No. 6, 16, 26 & 045.. 4 25
Triumph..... 3 50
Forest Clipper..... 3 00

BLOCKS.

Snatch.
Wooden.....60&10%
Steel.....50%

Tackle.
Iron Strapped.....70&10%
Com. Steel.....60%

BOARDS. (New List)

Stove.....50&10%

Wash.
Globe, single.....per doz. $2 50
Globe, double..... " 3 35
Memphis Globe ..... " 2 75
Crystal Glass..... " 4 00
Brass King..... " 3 75
Nickel Plate..... " 4 15

BOBS, PLUMB.

Carpenters'.
No. 2, iron.....per doz. $0 65
No. 00, " ..... " 1 30
No. 0, " ..... " 2 20
No. 3, lead..... " 2 75
No. 4, " ..... " 3 40
No. 112, brass plated.. " 1 10
No. N30, nickel plat'd. " 1 30
No. N31, " " " 1 85

BOLTS.

Carriage, Machine, etc.
Carriage, ⅜x6 and sizes smaller and shorter.....70&10%
Carriage, sizes larger and longer than ⅜x6.....60&10%
Machine, ⅜x4 add sizes smaller and shorter.....70&10%
Machine, sizes larger and longer than ⅜x4.....60&5%

Elevator.....50-10&5%
Plow.....60&10%
Stove .....80&10%
Tire.....75%
Wagon Box Strap.....70%

Mortis, Door.
Gem, iron.....60%
Gem, bronze plated.....20%

Barrel.
Cast.....60%
Wrought.....75&10%
Wrought, bronzed.....60%

Flush.
Wrought.....50&10%

Spring.
Wrought .....75&10%
Wrought, heavy.....70&10%

Square.
Cast.....50&10%
Wrought.....75&10%

BORERS.

Angular.
Miller's Falls.....per doz. $13 00

Bung. Doz.
Enterprise Mfg. Co.'s No 1.....20%
" " " No 2.... 20%

BOXES

Mail, No..... 1 2 10
Per doz.....$3.50 5.00 17.50

Miter.
New Langdon.....15&5%
Stanley's.....30%
Seavey's.....each, $1 50

BRACES.

Barber's ..... 50&10%
Fray's Genuine Spofford's.....60%
" Nos. 66 to 146.....50%
" No. 0108..... $3 50
" No. 08..... 2 75
" No. 010..... 3 00

BRACKETS.

Hay-Rack.
Wenzelmann's No. 1, per doz. $9 00
" No. 2, " 9 00

Shelf.
Cast Iron, bronzed.....50-10&5%
Clover Wrought Steel.....70&10%
Clover Folding 70%

BROILERS.

Wire.....70%
No. Crown, Self-basting, 50doz .. $2 50

BUCKETS.

Pump, Rubber.
Wychoff.....per gro. $4 75
Cooper..... " 4 75
Champion..... " 7 50
Victor..... " 9 25
Star ..... " 5 00
IXL..... " 6 75

Well.
Galv'd Qts..... 10 12 14
Per doz.....$2.90 $3.25 $3.40
Wooden, top ear, plain, per doz. 4 00
" " swivel, " 5 10

BUCKS, SAW.

Folding.....per doz. $2 10

BURRS, RIVETING.

Copper Burrs only.....20%
Tinners' Iron Burrs only.....65&5%

BUTTS.

Cast Iron.....70&5%
Wrought Brass (New List)....40&10%
Wrought Steel, Bright.....80&10%
Wrought Steel, Japanned.
Nos. 731 and - .....70&10&10%

CALIPERS.

Double.....35%
Inside and Outside.....35%
Wing.....30%

CALKS.

Logger's Boot.
(Lufkin R. Co.'s), per M..... $3 75

Toe.
Shoenberger.....per lb 5 c
Bessemer..... " 4½c
American..... " 7 c
Swedes..... " 6½c

CANS.

Cheese Factory.
Ontario Pattern.
Gallons..... 20 30 40
Each..... $4.25 $5.00 $6.25

Milk.
Holstein.
Nos..... 300 301 302
Gals..... 5 8 10
Per doz.....$17.50 $22.00 $25.00

Gem Pattern.
Nos..... 400 401 402
Gals..... 5 8 10
Per doz.....$17.50 $21.50 $23.50

Omega Pattern.
Nos. ..... E. 2 E. 3
Gals..... 8 10
Per dozen..... $23.50 $26.50

Jersey Pattern.
Nos..... 80 81
Gals..... 8 10
Per doz..... $23.00 $27.00

CAN OPENERS.

See Openers.

CAPS, GUN.

See Ammunition.

CARPET STRETCHERS.

See Stretchers.

CARRIERS.

Hay.
Diamond, Regular.....each, $3 85
Diamond, Sling..... " 6 50
Myers' Imperial ..... " 3 85
Myers' Clover Leaf..... " 4 00

CARTRIDGES.

See Ammunition.

CASTERS.

Standard—Ball Bearing.....50&10%
Bed.....60&5%
Common Plate.
Brass Wheel.....60&10%
Iron and porcelain wheels, new list.....60&5%
Philadelphia Plate, new list.....60%
Martin's.....60%
Payson's.....75&10%

CATCHERS, GRASS.

Carroll's, No. C.....per doz. $4 25
Wildermuth's,.
Nos..... 1 2 3
Per doz.....$5.60 $5.75 $6.25
Nos..... 4 5 6
Per doz.....$6.75 $9.50 $10.00

CHAIN AND CHAINS.

Breast Chains.
Doubleslack.....doz. pairs, $5 75
With Covert Snaps. " 5 00
With Slide..... " 3 25
Without Slide..... " 2 85

Bright Ox Chains.
½-in. $7.25; ⅜-in. $5.45 per 100 lbs.

Cable Coil Chain.
Inch..... 3/16 ¼ 5/16 ⅜
Per 100 lbs.$10.80 $8.00 $7.00 $6.20
Inch..... 7/16 ½ ⅝ ¾
Per 100 lbs.$6.00 $5.90 $5.75 $5.65
Inch..... ⅞ 1 1¼
Per 100 lbs.....$5.55 $5.55 $5.65

Cable Log Chain.
Advance 25c per 100 lb. on Cable Coil.

Cow Tie Chains.
American, 2 toggle.....50&5%
" toggle and snap...50&5%
" open and closed ring.....50&5%

Halter Chains.
American, new list.....33⅓%
German.....60%
Niagara, new list 40%
Brown's, " 40%

Picture Chains.
Light Brass, 3 ft.....per doz. $0 75
Heavy Brass, 3 ft .... " 1 00

Pump Chain
Galvanized, per 100 lbs.....$5 50

Safety Chain.
Brass.....60%

Special Steel Loading Chain.
Inch..... ½ 9/16 5/8
Per 100 lbs.....$16.00 $13.50 $12.50

Stretcher Chains.
5/16-in. $8.50; ½-in. $7.75 per 100 lbs.

Tie-Out Chains.
Brown's.....70&5%

Trace Chains.
Western Standard.
6½— 6-2.....per pair 30c
6½— 8-2..... " 34c
6½— 8-3..... " 33c
6½—10-2..... " 38c
7 — 8-2..... " 38c
7 —10-2..... " 42c
7 —10-1..... " 48c
7 —10-0..... " 60c
Add 2c per pair for Hooks.
Add 2c " for Twist Link.

Wagon Stay Chains.
Inch..... ½ 9/16 ⅝
Per 100 lbs.....$6.50 $6.00 $5.50

CHALK, CARPENTERS'.

Blue.....per gro. 75c
Red..... " 65c
White..... " 55c
Common White School
Crayon..... " 10c

CHARCOAL.

In bags.....per bag 90c

CHECKS, DOOR.

Blount.....33⅓%
Sargent's.....33⅓%

CHIMNEY TOPS.

Iwan's Volcano.....50%

CHISELS.

Box.
Inches..... 10 12 14
Round per doz....$2.10 $2.25 $2.75
Flat " ... 2.55 3.60 4.20

Cold.
Good quality, ⅞ in. and larger.....per lb. .13c
Smaller size per doz.....

Socket, Framing and Firmer.
Clover.....75&10%

Tanged, Firmer.
With handles.....30&5%

Choppers, See *Cutters, Meat.*

CHUCKS, DRILL.

Goodell's, for Goodell's Screw Drivers.....per doz. $6 25
Yankee, for Yankee Screw Drivers..... 5 00

CHURNS.

Anti-Bent Wood,
Gal..... 5 7 10
Each.....$3.90 $4.00 $4.85
Belle, Barrel.....65&7½%
Common Dash, Gal. 4 5 6
Per doz..... $7.75 $8.50 $10.50
Union, Gal..... 5 7 10
Each.....$3.65 $3.90 $4.75

CLAMPS.

Adjustable.
Martin's.....30%

Carpenters'.
Steel Bar.....25%

Hose.
Sherman's, brass, ½-in., per doz.. 42c
Double brass, ½-in., " 90c

Saw Filers.
Disston's list, $30.00.....30%
Stearns', No. 0, $2.50; No. 1, $11.50; No. 3, $5.00 doz.
Wentworth's, No. 1, $8.00; No. 3 $8.10.

CLAWS, TACK.

Cast, wood hdle.....per doz.45@60c
Forged steel, wood hdle " $0.80
Solid steel..... " 1 00
Giant..... " 50

CLEANERS.

Drain.
Iwan's Adjustable.....55%
Iwan's Stationary.....40&5%

Pot.
Wire.....per doz. $0 75

Side-Walk.
Steel.....per doz. $3 25
XLCR .....65&5%

CLEAVERS

Family.
Griffin, Inch..... 6 7 8
Per doz.....$5.50 $5.75 $6.25
Royal.....per doz. 2 25

Butchers.
Plumbs.....25%

CLEVISES

Malleable .....5½c lb.

CLIPPERS.

Bolt.....$1.90@4.75

CLIPS.

Axle.....65&5%

Damper.
Standard.....per doz. 65c
Troy..... " 38c

Hame..... " 17

CLOTH

Emery.
Star.....50%
B. & A.....50%

Hardware Wire—full rolls (100 ft.)
2 to 3 incl., Galv.—in full roll... 2 75
4 and 5..... " .. 3 00
6..... " .. 3 25
7 and 8..... " .. 3 75

Screen Wire.
12 mesh, painted, per 100 sq. ft.. 1 35

COCKS AND FAUCETS.

Compression Plain Bibbs...60, 10&5%
Lever Bibb Cocks.....60, 10&5%
Compression Hose Bibbs . 50—10&5%

Telegraph Faucets (new list)..50—5%
Racking Cocks (new list)...60, 10&5%
Compression Lock C'ks(new list).70%
Andrew's Brass Faucets.....70%
Angle Plug Faucets, per doz....$0 85
Milk Can Faucets, per doz..$2.60-4.20
Petroleum Faucets .....75&5%

COLLARS, STOVE PIPE.

Inches..... 5 6 7
Plain Tin..per gro.$1.90 $2.40 $3.50
Japanned Tin " 3.00 3.00 4.25
Lacquered Brass" 3.00 4.50 4.25

COMBS, CURRY.

Nos... 000 11 15 39 80 100
Per
Doz..$.37 .60 1.00 .90 1.15 .80
Nos... 290 320 390 522 620 1400
Per
Doz.$1.05 .85 1.35 1.20 .75 1.40

COMPASSES.

Carpenters'.....60%
Pencil—Faber's.....per doz. $1.00

COPPER—See Metals.

COPPERS.

Soldering.
1 lb.....per lb 30c
1½ lb.....31c 2 lb... " 29c
3 lb and larger..... " 26c

CORD.

Picture
White Wire (new list) .....85&10%

Sash.
Monarch Braided Flax...per lb
Silver Lake, white, 7-32 in. "
Silver Lake, white, 8-32 in. "
Keystone.....8-32 in. " 29c

CORKSCREWS.

Humason & Beckley.....33⅓%
Walker's.....33⅓%
Williamson's Regular.....40&10%
Williamson's Forged Worm.....50%

COTTERS, SPRING.

All sizes—new list.....90&30%

COUPLINGS, HOSE.

Brass.....per doz. $1 00
Brass Plated..... " 85

COVERS, WAGON—See Tents.

CRADLES, GRAIN.

Morgan's Grapevine....per doz.$22 75

CRAYONS—See Chalk.

CROW BARS.

Inch or Wedge Point.....per lb 3½c

CUTTERS.

Glass.
Red Devil.....45%
Smith & Hemenway Co.....50%
Woodward.....40%

Meat.
Enterprise, Nos. 5, 10, 12, 22, 32 and 42.....25%
No. 202, list, $1.50 ea.....40&7½%

Pipe.
Stanwoods. No.... 1 2 3
Each.....$0.85 $1.50 $4.0

Slaw and Crout.
3-knife Crout.....per doz. $9 7
1-knife Slaw..... " 1 6
2-knife Slaw..... " 2 2
Washer..... " 7 7

DAMPERS, STOVE PIPE.

Jewel.....50&10%
American.....50%

DIES AND STOCKS.

Discount.....40%
King's, Little Giant.....33⅓%

DIGGERS.

Post Hole.
Acme.....per doz. $9 25
Atlas..... " 9 00
Eureka..... " 7 50
Hercules..... " 10 25
Iwan's Split Handle.. " 7 50
Iwan's Perfection.... " 9 00
Iwan's Hercules pattern " 10 00
Ryan's..... " 17 00
See also Augers—Post Hole.

Dividers, Wing.....65&10%

DOOR CHECKS—See Door.

DOORS, SCREEN.

⅞ in. 4-panel, pain ted...per doz. $7 93
1⅛ in. 4-panel, pain ted... " 9 50
1⅛ in. 3-panel, natural pine, tancy..... " 12 40

DOOR HANGERS—See Hangers.

DRILLS.

Bit Stock.....60&10%
Blacksmith's Twist.....60%
Breast.
Fray's No. 9.....each, $1 75
Millers Falls No. 12..... " 2 10

Hand.
Goodell's Automatic.
Nos..... 01 02 3 20
Per doz.. $7.75 $12 50 $12.50 $11.00
Goodell's Single Gear. per doz. 15 75
Millers' Falls " " " 12 75
" " Double " " 15 25

Reciprocating.
Goodell's.....per doz. 16 50

Bit Stock.
Standard List..60&5%@60%@10

DRIVERS, SCREW.

Standard.....65&10%
Lock Ferrule.....60%
Champion.....40&10%
Champion Pattern.....70%
Clark's Interchangeable.....30%
Edison.....60%
Reed's Lightning.....45&5%
Goodell's Spiral.....50, 10, 5&2½%
Yankee Ratchet 50%
" " Spiral.....50&10%
Smith & Hemenway Co.....40&5%

EAVES TROUGH, GALVANIZED.

Terms, 2% for cash. Factory shipments generally delivered.

See also conductor pipe and elbows.

EGG BEATERS—See Beaters.

ELBOWS.

Adjustable Stove.
Inches..... 5 6 7
Smooth, per doz...$0.75 $0.85 $1.20
Plan'd, " 1.80 2.00 2.65

Corrugated Conductor.
Discount.....75&10%

Corrugated Stove.
Inches..... 5 6 7
Smooth, per doz..$0.85 $1.00 $1.50
Pol'd, " .. 1.40 1.65 2.25
Plan'd, " .. 2.15 2.65 3.40

Four-Piece Stove.
Inches..... 5 6 7
Smooth, per doz..$0.60 $0.35 $0.95
Planished. " .. 1.40 1.70 2.30

EMERY CLOTH—See Cloth.

EMERY TURKISH.

Size .....5-lb. pkgs. ½ kegs. kegs.
No 60 to 150, per lb.. 6c 4c 4c
Flour..... " ... 5c 3c 3c

ENAMEL, IRON.

A-B Iron Enamel, 3 doz. case, ...per gro., 15 00
Peerless..... 1 25

EXTRACTORS, PIG.

See Forceps, Pig

EYES.

Bright Wire Screw—See Goods, B. W.
Drifting Pick.....60, 10&5%
Hooks and—
Brass.....50&10%
Iron.....70%

FASTENERS, STORM SASH.

Schroeder's.....per doz. $0.85
Sensible..... " 1 15

FAUCETS—See Cocks.

FILES AND RASPS.

Delta.....70&10%

FLUE STOPPERS—See Stoppers.

FORCEPS, PIG.

Superior.....per doz. $4 7
Whisson's Imp..... " 5 2

FORKS.

Barley.
Steel New List.....65&10%
Wood, 4-tines, per doz.....$5 0

Coal, Coke, Cottonseed.....30%

Hay.
2-tine.....60%
3 " .....60&5%
4 " .....60&10%
Digging.....65&5%
Scoop.....30%

Header.
3-tine.....60&5%
4 " .....60&5%

Manure.
4-tine 60%

Ore.....40%

Spading.

FRAMES.

Hack Saw.
Union.....per doz. $5 75
Jenning's adj..... " 7 50
Cast..... " 2 50

FREEZERS, ICE CREAM.

Arctic.
Qts..... 1 2 3 4 6
Each...$1.10 1.30 1.50 1.80 2.30
Qts..... 8 10 12 15
Each.....$2.95 3.80 4.50 5.20

Jack Frost.
Qts..... 2 3 4 6 8 10
Price .$1.60 1.90 2.20 2.80 3.60 4.65

GAUGES.

Butt and Rabbet.
Cream Pail.
Fairmont.....per doz. $3 75
Marking, Mortise, etc.....
.....50&10%

Saw.
Wire.
Disston's.....25%

GIMLETS.

Discount.....35@40%

GLASS, WINDOW.

Single.....90&20%
Double.....90&25%

GLASSES, LEVEL.

GLUE.

Bulk.
B Amber.....per lb. 12
A White..... " 15
H. S. Amber..... " 16½c

Liquid.
Army & Navy.....40%
Le Page's—
List "A".....37½%
List "B".....33⅓%
List "C".....25%

GOODS.

Bright Wire.....90%

GREASE, AXLE.

Wood Boxes.
Diamond.....per gro. $5 50
Frazer's..... 9 50
Hub Lightning..... 5 25
Paragon..... 6 75

Wood Pails.
Frazer's, 15 lb. 80c; 25 lb. $1.30 each.
Hub Lightning, 15 lb. 55c; 25 lb 70c each.

Tin Cans.
Chamellene Graphite.
1 lb. per gross.....$9 50
3 lb. per gross.....25 00
5 lb. per gross.....37 00

GRIDDLES.

Soapstone.....33⅓%

GRINDSTONES.

Family.
Inches..... 6 8 10
Per doz.....$7.25 9.75 12.00

Loose.
Per ton.....$20 00@$21 00

Mounted.
Ball Bearing..... 1 2 3
Each.....$3.15 3.00 2.85
Common Bearing ... 1 2 3
Each.....$3.00 2.80 2.65

GUN WADS
(See Ammunition.)

HAFTS, AWL.

Brad.
Common.....per doz. $0 19

Peg.
Common..... " 22
Patent, plain top..... " 47
Patent, leather top... " 52

Sewing.
Common..... " 22
Patent..... " 52

HALTERS.

Jute Rope.....per doz. $1 10
Sisal Rope..... " 1 85
Web..... " 2 00
Leather, rope tie..... " 8 50
Leather, leather tie..... " 11 50

HAMMERS, HANDLED.

Blacksmiths' Hand.
Plumbs.....60&5%

Engineers'.
Plumbs.....60&5%

Farriers'.
Plumbs.....40&10%

Machinists'.
Plumbs.....60&5%

Nail.
Plumbs.....40&7½%
Quaker City.....per doz. $3 50
Cast..... " 1 15
Maydole's.....30&5%

Riveting.
Plumbs.....40&12½%

Shoe.
Cast.....per doz. $0 90

Tack.
All Iron.....per doz. $0 35
Pol'd Iron, Hickory hdl. " 40
Mall. Iron, Inlaid..... " 1 55
Magnetic..... 1 2 3
Per doz.....$0.70 .80 1.00
Magazine.. .....per doz. 1 75

HAMMERS, HEAVY.

Heavy Hammers and Sledges.
Under 5 lbs .....80&5%
5 lbs. and over.....80&10%

Masons'.
Single and Double Face.....80&5%

HANDLES.

Auger.
Common Assorted....per doz. $0 50
Pratt's Adjustable, Nos. 1 & 2, per doz..... 4 50
Ives' Adjustable.....per set, 1 35

Axe.....40%

Chisel.
Hickory, Tanged Firmer, Assorted, 33c; Large, 38c per doz.
Hickory, Socket Firmer, Assorted, 27c; Large, 30c per doz.
Applewood, Tanged, Firmer, Assorted, 29c; Large, 38c per doz.
Applewood, Socket, Firmer, Assorted .....per doz $0 24

Coal Pick.....40%

Drifting Pick.....40%

File, assorted, 13c; Large, 16c per doz.

Hammer.
Adze Eye.....per doz. $0 40
Blacksmiths'..... " 40c@70c
Machinists'..... " 45c@70c

Hatchet..... " 40

Hay and Manure Fork.....30%

Hoe and Rake.....30%
Plain.....per doz. $0 75
Varnished..... " 80

Screw Driver.
Assorted..... " 37
Large..... " 48

Shovel and Spade.....33⅓%

HANGERS.

Barn Door.
U. S. Rolled Bearing.....60&10%
Matchless.....50&10%
Storm King.....60%
World's Best.....50%
Wagner's Adjustable.....70&10%
Warehouse Big Twin.....25%

Conductor P.
Griffin.....70&10%
Iwan's Perfection.....50%

Eave Trough.
Baker's.....per gro. $2 35
Imperial.....20%
Wire.....33⅓%

Parlor Door.
Acme.....per set, $3 75
Ives' Improved..... " 2 60
Lane's Standard..... " 3 50
Lane's New Model.... " 3 10
Le Roy Noiseless..... " 4 00
Richards'.....40-10&5%

HASPS.

Hinge, Wrought.....40%
With Staples—See Staples.

HATCHETS.

Crescent.....50&10%
Cast Claw.....per doz. $1 10@1 35
Cast Shingling.... " 1 25
Germantown.....30%

HAY KNIVES.

See Knives.

HAY RACK BRACKETS.

Wensleman's No. 1.....per doz. $9 00
Wensleman's No. 2..... " 9 00

HINGES.

Blind.
Clark's Gravity ... per doz. sets, 95c
Parker's.....65%
Shepherd's Noiseless, for Wood Casing.....per doz $1 92

Gate.
Clark's..... 1 2 3
Hgs & Ltch.. doz. $2.50 3.25 4.22
Hinges only... " 2.00 2.50
Latches only . " .90 .90
Knuckle.....per doz prs. $6 00
Leed's..... " sets 6 75
Superior..... " prs. 9 50

Spring.
Banner.....50%
Chicago.....25&5%
Columbia Dbl. Acting....40&10&5%
Gem.....25%
Ideal Detachable.....per gro. $11
Matchless.....40%
New Idea.....per gro. $8 00
Oxford.....20%

Wrought Iron.
New Lists .....
Light Strap Hinges.....60%
Heavy Strap Hinges.....60, 10&10%
Light T Hinges.....55%
Heavy T Hinges.....45%
Extra Heavy T Hinges.....60%

Screw Hook and Strap.
6 to 12 in.....per 100 lbs. $4 50
14 to 20 in..... " " 4 25
22 to 36 in..... " " 4 00

Screw Hook and Eye.
¾ in.....per 100 lbs. $6 75
½ in..... " " 7 75
⅜ in..... " " 9 75

HOES.

Garden .....70&10%

Grub.
Extra.....70%
Hazel.....per doz. $5 00
Ladies' and Boys'.....75%
Mortar.....75&10%
Planter's Eye.....62½%
Weed.....75&15%

HOLLOW WARE—See Ware.

HOOKS.

And Eyes.
Brass.....60%
Iron.....70%

Awning.....per gro. 80&10%

Belt.
Brown's.....70&5%
Jones'.....65&5%

Bench.
See Stops, Ben

Box.
Inch..... 5 7 10 12
Per doz..... $1.90 2.10 2.25 2.68
Humason & Beckley's..per doz. $2 50
(See Goods, Bright Wire.)
Bush.
Common Axe Handle. per doz. $7 00
Chain.
Inch..... 1/4 & 5/16 3/8 7/16 1/2
Per 100...$7.60-8.10 9.75 11.50 12.60
Clothes Lines.
Japanned .....per doz 22c@24c
Galvanized..... " 40c
Coat and Hat
Cast Iron . . . . per gro. 72c@$1 50
Gem Wire.....70%
Conductor.
Malleable.....25%
Wrought.....20%
Corn.
Common, rivetted, painted red.....per dos. $2 25
Little Giant..... " 3 25
Gate.
See Goods, Bright Wire.
Grass.
Common. Nos..... 2 3 1
Per doz.....$1.50 1.60 1.70
German.....per doz. 1 75
Gypsy..... " 2 50
Hammock.
With plate.....per doz. 50
With screw..... " 45
Lambrequin, or Drapery, per gro. .21c
Picture.....50%@50&10%
Potato and Manure.....70&12½%
Screw.
Brass.....80&5%
(See Goods, Bright Wire.)
Seat Spring .....per lb. 5½c

HOOPS, TUB.

Elastic . . . per case of 2 doz.... $1 50

HOSE, GARDEN.

	Coupled per ft.
Velvet, 3 ply-¾" guar. press.....	7½
Eclipse, " " "	8½c
Diamond " " "	10
Jeanette " " "	13c
Pennsylv'a " " "	16c

COTTON COV. RUBBER HOSE.

High Grade-¾"-guar. press. 400 lbs. 11½
Special " " " 300 " 9½c
Leader " " " 100 " 7½c

HUSKERS.

Boss.
Nos..... B BB E 200
Per doz.....$2.00 2.00 1.75 .80
Nos..... L PP P K
Per gro.....$5.40 6.00 6.00 10.50
Nos..... 2000 3000 O
Per gro.....$3.50 9.00 24.50
Nos..... 60 50 64 68
Per doz.....$2.15 2.15 .85 1.45
Brinkerhoff's.
Per gro.....$14 40

IRON.

See Metals.—First column.

IRONS.

Curling.
C.....per dos. $0 40
B..... " 50
A..... " 58
Princess..... " 70
Thelma..... " 1 25
Pinking..... " 70
Plane.
Wood Bench.....20&5%
Sad.
Charcoal.....per doz.$11 00
Common, polished, per 100 lb. 3 75
No. 70 Asbestos.....$1 20 net
No. 100 " ..... 1 30 net
Common, nickel plated, 5 25
Chinese Polishing.....per dos. 7 40
Laundry, No. 1..... " 5 75
Laundry, No. 2..... " 4 25
Mrs. Pott's
No. 50 J. Enterprise, per set 93
No. 55 " " " 90
No. 50 T. " " 1 00
No. 55 T. " " 96
Tailors' Sad.....per lb. 5½
Tailors' Geese..... " 5½
Tuyere.
Single Duck Nest.....per doz $5 25
Double Duck Nest . . " 6 25
Sutton.....each.... 2 60

JACKS.

Locomotive.....70%
Wagon.
Miller 50%
Oliver,
Nos..... 0 00
Each.....$0.60 $0.80
Standard.
Nos..... 1 2
Each.....$0.60 1.00
Wilcox.
Nos..... 1 2 3
Each.....$0.85 1.20 2.00

KETTLES.

Brass.....15%
Cauldron.....40&5%
Copper..... per lb., 27c
Maslin.....65%
Sugar.....50%

KNIVES.

Beet Topping.
Clyde, 9-in. Scimiter Blade, dos.$3 85
California..... 3 40
Cooper's Hoop.....15%
Corn.
Clipper.....per dos. $1 75
Disston's..... " 2 75
Earle's..... " 3 00
Woodford..... " 2 25
Drawing.
Standard.....70%
Adjustable.....15%
Barton's Carpenters' 10%
Folding Handle.....25&5%
Hay.
American, Sickle Edge...dos. $10 50
Canton, Sickle Edge..... " 8 25
Heath's..... " 8 00
Iwan's, Sickle Edge..... " 9 50
Iwan's, Impv'd Serrated . " 10 00
Lightn'g, Holt's Genuine. " 6 50
Lightning Pattern..... " 6 00
Wadsworth's Sp'r Poin'.. " 8 50
Hedge.
Challenge.....per dos. $6 00
Disston's..... " 3 75
Mincing.
Common, Single..... " 40
Common, Double..... " 50
Streeter, 4-Blade..... " 1 30
Streeter, 6-Blade..... " 2 00
Putty.
Common.....per dos. $0 60@1 00
Lander'r..... " 1 40@1 75
Scraping.
Beech Handle..... 75@1 00
Lander's..... 5 25@6 00

KNOBS.

Door.
Mineral.....per doz. $0 80
Porcelain..... " 90
Jet..... " 90

LADDERS.

Common Long.
Per ft.....9c@14c
Extension.
Per ft.....14c
Step.
Common, per ft.....7½c
Common, with Shelf, add 10c.
Keystone.....15c
Triumph, per ft.....20c

LANTERNS.

Bull's Eye Police.
3 -in. Flash Light....per doz. $6 00
2¾-in. Regular..... " 4 90
3 -in. Regular..... " 5 50
Tubular.
Dietz & Hanes' . . ..net prices.

LEADERS, CATTLE.

Nos..... 1 2 3
Per doz..... $0 55 .70 2.75

LEATHER, LACE.

Cut.....33⅓%
Sides.
Ex. Quality ..... per sq. ft., 27

LEATHERS, PUMP.

Valve and Plunger.....10%

LIFTERS.

Stove Cover.
Coppered.....per gro. 1 75@3 65
Ideal..... " 5 50
Alaska, Coppered " 4 00
Alaska, Nickeled. " 5 00
Transom.
Payson's.....80%

LINES.

Chalk.
Twisted in 20-ft. hanks.
Nos.... 4 6 7 8 9
Gross...$1.50 2 00 2 25 2 50 3 00
Twisted in 50-ft. balls.
Nos..... 1 2 3 4
Per doz.....25c 30c 35c 41c
Braided in 20-ft. hanks.
Nos..... 0 1 2 3
Per doz.....22c 25c 31c 35c
Mansons', in 100-ft. hanks...doz. 80c
Clothes.
60-ft. Jute.....per doz. $0 95
72-ft. Jute..... " 1 15
60-ft. Sisal..... " 1 40
72-ft. Sisal..... " 2 15
50-ft. Cotton..... " 1 15
50 ft. Braided Cotton. " 25

LINING, STOVE.

Bricks .....per crate. 42c

MACHINES.

		Without Augers	With Augers
Boring.			
Angular.....per doz.		3 00	4 40
Upright.....	"	2 60	4 00
Leather Riveting.			
Chicago, Pomeroy....per doz.		$9 00	
Excelsior.....	"	2 00	
Handy.....	"	2 00	
Little Giant.....	"	3 00	
Pony, Pomeroy.....	"	7 20	
Washing.			
Winner.....per doz.		54 00	
Keystone.....	"	54 00	
U. S. Steel.....	"	60 00	
Advance, f.o.b.Chicago	"	24 50	

MAIL BOXES.

See Boxes.

MALLETS.

Carpenters'.
Fibre Head, Small....per doz. $5 00
" " Medium. " 5 75
" " Large... " 7 00
Round Hickory..... " 2 25
" Lignumvitæ... " 4 00
Square Hickory..... " 2 25
" Lignumvitæ... " 4 50
Tinners'.
Applewood..... " 1 70
Hickory..... " 1.00@1 50
Hickory Sheet Iron... " 1 50

MATS.

Door
National Rigid.....50, 10&5%
Acme Steel Flexible.....33⅓%
Stove.
No. 2.....per gro. $3 25
No. 1..... " 3 50
No. 1 Asbestos Toasters, or wire-covered Stove Mats, with handle.....per doz. 1 10
No. 2 Asbestos Toasters, with ring.....per doz. 60

MATTOCKS.

Plumbs.....65&10%
Extra.....60%

MAULS.

Iron, lbs.....	10	13	16	18
Per doz....	$4.00	4.50	5.25	5.60
Wood face, lbs.....	10	12	14	
Per doz.....	$5.00	5.50	6.00	

Wood Choppers'.
Lake Super'r & Oregon Pat. 75&10%

MEASURES.

	½ pk.	1 pk.	bu.
Galvanized, per doz.	$2.25	3.00	3.85
Japanned.. "	1.75	2.45	3.15

MICA.

First Quality.....40&5%
Second Quality.....50&5%

MILLS, COFFEE.

Enterprise.....25%
Parker.....50&5%
Arcade.....40-12½&2½%

MITRE BOXES.

See Boxes.

MOPS.

Erie.....per doz. $3 15
Handled Cotton.
Pounds..... ¾ 1 1½ 2
Per dozen....$2.00 2.35 2.65 3.25

MOWERS, LAWN.

Gladiator—B. B.
Inches..... 16 18 20
Each..... 6.50 7.25 8.00
King Universal—B. B.
Each..... 5.25 5.75 6.00
Inches..... 14 16 18
Big Giant..... 3.50 3.90 4.25
Little Giant..... 2.50 2.65 2.75

NAILS.

Cut Steel .....rates, $2 50
Cut Iron..... 2 60
Wire.
Small Lots..... $2 25
Carload Lots..... 2 15
Cement Coated..... 2 30
Horse Shoe.
Ausable.....55&5%
Capewell.....15%
Perfect.....55&5%
Putnam.....20&5%
Star.....35&5%
Clover Leaf .....per lb., net, 10½c
Picture.
Brass Heads.....25%
Brads.....85%
Furniture.....15%

NAIL PULLERS.

See Pullers.

NAIL SETS.

See Sets.

NETTING, POULTRY.

Galvanized beforeweaving .80,10&2½%
Galvanized after weaving.....80&7½%
Cut Pieces.....65&5%

NIPPERS.

End Cutting.
Stubb's Pattern. Inches 5½ 6
Per dozen..... $4.00 4.25
End and Diagonal Cutting.
Swedish Side.....75%
Hoof.
Heller's.....40&10%
V. & B.....55&5%

NOZZLES.

Hose.
Genuine Gem.....per doz. $3 90
Magic..... " 3 60
Mystic..... " 3 00

NUTS, HOT PRESSED.

Square Blank.
In ¾ ⅞ 1 1⅛ 1¼ 1½ 1¾
lb 9½c 8c 6½c 5½c 5½c 5c 4½c
Square Tapped.
In. ¾ ⅞ 1 1⅛ 1¼ 1½ 1¾
lb. 12½c 10½c 8c 7½c 6½c 6½c 6c
For 5-lb. boxes add ½c per lb. to above prices.

OILERS.

Chase Pattern.
Brass and Copper.....60%
Zinc.....60%
Engineers'.
Cannon.....55%
Tin .....per doz. $2 00@$2 25
Machine.
Common.....per doz. $0 58
Copper Plated Steel... " 1 00
Malleable Iron.....60, 10&5%
Japanned.....55@75c

OPENERS.

Box.
Inches..... 10 12 14
Flat.....per doz. $2.85 3.60 4.15
Round.... " 2.10 2.25 2.75
Can.
Delmonico .....per doz $1 30
Never Slip..... " 65
Crate.
V. & B..... " 5 25

OUTFITS, COBBLING.

Combination.....per dos. 11 00
Economy..... " 4 65
Family..... " 9 75

PADLOCKS.

Eureka.....40, 10&5%
Yale.....60&5%

PAILS.

Cream.
14-qt , without gauge, per dos. $2 50
20-qt., " " " 3 00
20-qt., with gauge.... " 3 50
Sap.
10-qt., Galvanized, per 100....$13 00
12-qt., " " 14 50
14-qt., " " 16 25
16-qt., " " 17 75
10-qt.,IC Tin..... " 10 25
12-qt., " .... " 11 75
14-qt., " .... " 13 00
10-qt.,IX Tin.... " 12 75
12-qt., " .... " 16 00
14-qt., " .... " 17 00
Stock.
Galv'd, qts. 14 16 18 20
Per dos..... $3.75 4.00 4.75 5.25
Water.
Galvanized... qts. 10 12 14
Per doz..... $1.95 2.20 2.45
Wood.
Cable, 2-Hoop.....per doz. $1 70
Cable, 3-Hoop..... " 1 90
Cedar, 3-Hoop..... " 2 85
Standard, 2-Hoop.... " 1 60
Standard, 3-Hoop.... " 1 80

PANS

Dripping.....60&5%
Fry
Common .....75&10%
Acme 70%
Roasting.
Paxton,
Nos..... 1 2 3 4
Per doz.... $4.75 5.75 6.50 7.50
Neverburn . . 4.00 4.50 5.50 6.00
Savory, No. 200.....per doz. $8.00

PAPER.

Building.
Plain.....per 100 lbs. $1 25
Tarred..... " 1 35
Tarred Felt..... " 1 65
No. 20, Red Rosin....per roll, 40
No. 30, Red Rosin.... " 55
Sand and Emery
Star ..... low list, 50%
B. & A.....50%
Wrapping.
Drab Fiber..... .....per lb. $0 00
Rag..... ..... " 0 00

PARERS.

Apple.
Bay State.....per doz. $13 00
Turntable..... " 6 00
White Mountain..... " 5 00
Reading..... " 7 00
Potato.
Goodsell's Saratoga, 10½ in., doz. 6 50
Goodsell's Saratoga, 5 in., doz. 5 50

PICKS.

Adze Eye Ore.....70%
Drifting and Poll Picks.....70%
Plumbs, Railroad.....70%
Surface.....70%

PINCERS.

Carpenters', cast steel.

Inches.....	6	8	10	12
Per doz.....	$2.00	2.60	2.95	3.75

Blacksmiths'.....45%
Heller's.....40%

PINS.

Clothes.
Common.....per box of 5 gro $0 52
Hoyt's..... " " 31
U. S..... " " 70
Picket.
Fluted, 15-in.....per doz. $0 70
Fluted, 21-in..... " 1 60
Spiral..... " 1 90

PIPE.

Conductor.

	Gal. Steel	Charcoal
L. C. L. to Dealers:—		
Eastern	70&10%	50&10&2½%
Pittsburgh	75&10&5%	60%
Central	75&10%	60%
Northwestern	75&7½%	60%
Western	70&12½%	50&12½%
Tennessee	70&10%	50&12½%
Southern	70%	50&12½%
Southwestern	70%	50&5%

Terms 60 days; 2% Cash 10 days.
Factory shipments generally delivered.

Lead.
Full coils .....per lb. 7½c
Cut coils..... " 7½c
Stove

Acme—Inches....	5	6	7
Smooth, per jt...	8½c	9½c	10½c
Planished, "	32 c	33 c	43 c
Peerless—Smooth,	7½c	8 c	9½c
Polished	14½c	15½c	18 c
Planished	28 c	31 c	35½c
Made-up—Inches..	5	6	7
Smooth	7½c	8 c	9½c

7 to 6 in. Smooth Tapers, pr jt...13c
6 in. Smooth T's..... " 27c
7 to 6 in. Planished Tapers.....45c

Yale Patent Lock Pipe—Stove.

	5"	6"	7"	7"to6"
	—Cents—			
Battle Axe Blue...	7	7½	9½	10½
Can't Slip " ..	7½	8½	10	11
Peerless " ..	7½	8½	10	11
Duplex " ..	10	11	13	14
Yale, Rus. Fin....	15	16	17	18
Duplex Planished.	29	31	37	38
Galvano, Gal.....	15	16	17	18

If wanted made up, add per joint or grooved, 1c; riveted, 1½c. Grating made-up pipe extra.

Wrought Iron Gas Pipe.
⅛@¼-in., black.....discount, 60%
⅛@¼-in., black..... " 60,10&5%
⅜-in. to 6-in, black... " 70%
7-in. to 12-in., black... " 62½%
⅛@¼-in., galvanized.... " 42%
⅛@⅜-in., galvanized.... " 50%
⅜-in. to 6-in., galvan'd " 57½%
7-in. to 12-in., galvan'd " 45%

PLANES.

Sargent Iron Bench.....60%
Stanley Iron Bench .....25&5%

PLATES, TIN.

See Metals in Column 1.

PLIERS.

Giant, Button's—80% off list.
Cutting
Bernard's.....30%
Lodi.....50%
Upper End and Diagonal Cutting
Swedish Side.....70%
Utica Drop Forge & Tool Co....60%
Fencing.
Black Bull.....per doz. $8 2
Farmers' Choice.....per doz. $8 0
Russell's..... " 8 2
Flat and Round Nose.
Bernard's.....30%
German.....65%
Lodi.....50%
Paragon.....50%
Gas.—Inches.. 7 8 9 10 12
Per doz..... $3.00 3.50 4.50 5.5

Tinners'.
Hollow.....40%
Solid.....each, 5½c

PLUMBS AND LEVELS

Common .....60&10&10%
Cook's.....40%
Davis' Iron.....25%
Davis' Inclinometer.....15%

POINTS

Drive Well Points.....75&5%

POKERS, STOVE.

Wr't Steel, str't or bent, per doz. $0 55
Wr't Steel, wood hand'ls " 80
Nickel Plated, coil hand'ls " 65

POKES, ANIMAL.

Cracker Jack, wr't steel, per doz. $4 50

POLISH.

Metal.
White Silk, half pints, per doz, $2 00
White Silk, 6-oz. cans, per doz. 1 00
Shoe.
M. C. D.....per doz.....36c@50c
F. C. O..... " 40c
T M..... " .55c@$1 75
Imperial.....per gro 5 00
Stove.
Black Eagle, 1-lb. cans, pr. gr. $15 00
Black Silk—
5-lb. pail..... $0 70
Paste, 5-oz. cans....per doz. 75
Paste, ½-lb. cans .... " 1 05
Liquid, ½-pt. cans... " 1 05
Liquid, 6-oz. cans... " 75
Black Jack, ½-lb. cans. " 9 25
Dixon's Carb. of Iron. " 5 75
Nickel Plate..... " 4 50

POPPERS, CORN.

Round or Square, 1-qt. per doz. $1 05
Square, 1½-qt..... " 1 15
Square, 2-qt..... " 1 35
4-qt..... " 3 75

POTS, FIRE.

Clayton & Lambert's,each,$4 75@6 25
Gate City.....each, 6 25
Gem.....each,$6 75@8 50

POWDER.

See Ammunition.

PRESSES, FRUIT AND JELLY.

Enterprise Manufacturing Co.....25%

PRIMERS

See Ammunition.

PRUNERS.

Disston's Pole.....per doz. $6 50
Henry's Improved..... " 75&10%
Water's Improved..... " 80%

PULLERS.

Cork.
Daisy..... each, $3 10
Phœnix..... " 1 40
Quick and Easy..... " 2 70
Nail.
Giant.....per doz. 10 50
Giant Pattern..... " 6 00
Jumbo..... " 9 00
Tack—Giant ..... " 40

PULLEYS.

Awning—Jap'd.....60%
Clothes Line.....50&10%
Hay Fork.
Iron Wheel, 5-in.....per doz. $1 75
Wood Wheel, 6-in.... " 1 75
Wood Wheel, 6-in., pass knot, ...per doz. 2 15
Hot House—Jap'd.....50&10%
Screw—Jap'd.....60%
Side—Jap'd.....50&10%
Sash.
Common.....per doz. $0 16
Common-Sense, 2-in.. " 20
Empire Pattern, 2-in.. " 20
Ideal..... " 20
Steel..... " 25

PUMPS.

Pitcher Spout.

Nos.....	1	2	3	4
Each.....	$1.00	1.15	1.30	1.70

Spray.
Blizzard.....per doz.$14 50
Cyclone, tin..... " 3 40
Cyclone, copper..... " 6 75
Daisy..... " 9 00
Little Giant.....each,... 2 25

PUNCHES.

Conductors'.
No 22.....per doz $2 2
Machine.....per lb 19
Saddlers'.
Common .....per doz 60c@70c
Good..... " 72c@84c

PUTTY.

In Bladders.
Strictly pure.....per 100 lbs. 2 35

RAIL.

Barn Door.
Matchless, 1-in..... 3 c
Matchless, 1½-in..... 3½c
Storm King..... 4 c
Sliding Door.
Painted steel.....per ft. 4½c
Bronzed wrought iron...per ft. 8½c

RAKES.

Coal or Wood.....per doz. $5 20
Garden.
Steel.....70%
Steel, bow.....70%
Malleable iron, heavy.....60&10%
Hay.
Wood.....$1 50@$2 00
Lawn—Wood.
XXX.....per doz. $3 00
Automatic..... " 5 25
Lawn Queen..... " 2 75
Jumbo, 36 teeth..... " 5 25

RASPS—See Files.

RAZORS.

Bo-ras-ic.....50%
Red Devil.....50%
Tree Brand.....50%

REGISTERS.

(All Sizes)

Japanned, Bronzed and Plated....70%
White Porcelain Enameled...50&10%
Solid Brass and Bronze Metal....40%
Single Valve (Baseboard and Sidewall).....70&10%

REGISTER FACES

Japanned, Bronzed and Plated
4x6 to 14x14.....70%
14x14 to 38x42.....75&10%
Heavy Round Gratings.....75&10%
White Porcelain Enameled...50&10%
Solid Brass or Bronze Metal.....40%

RINGS.

Bull.

Copper.....	2½ in.	3in.
Per doz.....	$1 10	$1 40
Rea's Improved Self-Piercing copper, pr doz	2 00	....
Steel, per doz.....	85	95
Nickel plated.....	1 35	....

and Ringers—Hog.
Blair's Rings.....per doz. $0 58
Blair's Ringers..... " 75
Brown's Rings..... 50
Brown's Ringers..... " 80
Champion Ringers.... " 1 60
Hill's Ringers..... " 70
Hill's Ring, boxes.... " 47
Major Rings..... " 60
Perfect Ringers..... " 95
Wolverine Rings..... " 1 40
Wolverine Ringers.... " 80
Fruit Jar.
White.....per lb.....30c
Key.
Split, round.....per doz. $0 17
Split, square..... " 32
Ball, round..... " 32

RIVETS.

and Burrs.
Copper Belt.....40%
Coppered Iron.....60&10&5%
Tinners'.....60&10%
Hame.....per lb. $0 10
Slotted Clinch per doz 40c@45c
Tubular
Nos 1 and 2 assorted sizes, doz, 45c

RIVET SETS

See Sets.

ROPE.

Cotton.
¼, 5-16 in. Com on reels..per lb. 11½c
¼, 5-16 in Com. in coils.. " 12 c
¼, 5-16 Imperial in coils.. " 21 c
Sisal.
1st Quality.....12 c
Hardware Grade, rates, per lb...10 c
Pure Manila.
1st quality.....per lb.15½c
Hardware Grade, rates... " 14½c

RULES.

Boxwood.....60&10%
Ivory.....

SASH WEIGHTS.

See Weights.

SAWS.

Back.
Disston's.....25%
Jackson's.....25%
Butchers'.
Disston's.....30%
Circular.
Disston's.....50%
Hiles'.....50&10%
Compass.
Common.....per doz $1 35@1 60
Disston's .....%25
Cross-Cut
Disston's.....45%
Dehorning.
Disston's.....per doz. $5 75
Hack.
Disston's.....25%
Keystone.....30%
Hand and Rip.
Brown's.....30%
Disston's No. 7.....30%
Disston's Nos. 8, D8, 12, 76, 112, D100, and 120 (new list).....25%
Keystone.....30%
Enterprise, hand.....per doz. $5 00
Our Saw, hand..... " 4 00
Our Saw, rip..... " 4 50
Keyhole—Disston's.....25%
Kitchen.
Sterling.....25%
One Man.....50%
Panel
Brown's 30%
Disston's No. 7.....30%
Disston's No. D100.....25%
Pruning.
Brown's 25%
Disston's 25%
Wood
Common.....per doz. $4 50
Clover Leaf..... " 6 00

SAW BUCKS—See Bucks.

SAW SETS—See Sets.

SAW TOOLS—See Tools.

SAW FRAMES.

Common, plain.....per doz. $1 25
Common, painted..... " 1 70

SCALES.

Counter.
Pelouze.....40&10%
Platform.
Osgood.....50%

SCOOPS.

Grain.
½-bu. "Hercules".....per doz. 13 70
1-bu. "Hercules"..... " 15 00

SCRAPERS.

Box.
Triangular.....per doz. $4 00
Cabinet.
Cast Steel . . . . per doz , 60c@75c
Road.

Cubic ft.	7	5	3
Without run's, ea.	$4.00	3.75	3.50
With runners, ea..	4.25	4.00	3.75

SCREWS.

Bench.

Iron, in.....	1	1½	1½
	$3.50	4.00	4.75

Wood, white maple...per doz. $3 50
Hand—Wood.....10%
Hand Rail.....80&10%
Jack.....70&10&5%
Lag or Coach—all sizes, gimlet pointed.....75&5%
Saw—Centennial.

Nos ..	1	2	3	4	5	6
Per doz.	18c	20c	25c	30c	23c	25c

Wood.
F. H. Bright.....87½&5%
R H Blued.....85%
F. H. Jap'd.....82½%
F. H. Brass.....85%
R. H. Brass.....80%
R. H. Nickel Plated.....75-10%

SCYTHES.

Be Ve Be, grass.....per doz. $5 00
Clipper, grass..... " 8 25
Clover Leaf Dutchman. " 7 50
Honest Dutchman..... " 7 50
Be Ve Be..... " 7 50

SHAVING SETS.

Smith & Hemenway.....60%

SETS.

Nail.
Round, common.....per doz. $0 33
Square, common..... " 42
Octagon, common..... " 33
No. 5, square..... " 75
Cup point, knurled... " 75
Rivet.
Farmers'.....per doz. $1 20
Tinners'.....50&10%
Saw.
Aiken's Pattern.....per doz $3 50
Common Lever..... " 1 20
Disston's Monarch.... " 6 50
Disston's X Cut ..... " 12 00
German..... " 1 05
Leach's..... " 80
Nash's Hand..... " 3 15
Nash's X Cut..... " 4 20
Stillman's Lever..... " 1 30
Stillman's X Cut..... " 2 50

SHARPENERS, SKATE.

Diamond.....per doz $1 00
Smith & Hemenway 20%

SHAVES, SPOKE

Iron.....per doz $1 10@1 85
Wood ..... " 2 75@4 75
Bailey's .....50&5%
Goodell's 15%

SHEARS

Pruning
Buckeye, No. 1.....per doz $5 75
Buckeye, No. 2..... " 7 40
California Pat., 9-in.. " 3 20
California Pat., 10-in.. " 4 00
Draw Cut, No. 3..... " 13 75
Draw Cut, No. 4..... " 16 50
Henry's Pat. 0 01 14 012
Per doz.....$1.40 2.10 2.90 2.80
Star.....per doz $4 00
Sheep—No BBA.
Inches..... 6 6½ 7
Reg. Grip.....$11.25 11.50 12.00
Nar. Grip.,doz.... 11.00 11.25 12.25
Tinners'—See Snips.

SHEAVES, SLIDING DOOR.

Common.
Inches..... 3 4 5
Per set..... $0.34 .42 .70
Hatfield's.
Per set..... $0.75 1.00 1.60

SHELLS—See Ammunition.

SHELLERS, CORN.

Union.....per doz. $6 75

SHIELDS.

Expansion Bolt Shields.....50&10%

SHOES.

Conductor.....60&10%

SHOT—See Ammunition.

SHOVELS AND SPADES

Coal.
No 2 Woodford.....per doz. $5 50
No. 182..... " 6 00
Ames' new list .....Discount, 12½%
Per doz.
Neverbreak, hollow bck, blk. $15 75
National.... " " " 14 75
Buckeye.... " " " 10 00
Mohawk.... " " " 9 00
Drain.
Iwan's Perfection.....50%
Railroad, etc.
Black Diamond.....per doz. $1 50
Crescent..... " 5 75
Keystone..... " 8 75
Star..... " 4 75
Vaterland..... " 9 50
Hollow Back..... " 4 75
Ames, new list .....Discount, 12½%
Snow.
Per doz.....$1.65@$9.00
Alaska Steel.
D Handle.....per doz. $3 50
Long Handle..... " 3 00

SINKS.

Cast Iron.
Painted.....50&10%
Enameled, White.....50&10%
Wrought Steel.
Painted, new list.....40-10&5%

SLEDGES—See Hammers.

SNAPS, HARNESS.

Champion.....33⅓%
German Pattern.....30&5%
Judd's Pattern.....50%

SNATHS.

Double Ring, Bush.....per doz. $6 00
Patent Loop, Bush..... " 5 75
Patent Loop, Grass..... " 5 50

SNIPS, TINNERS'.

Clover Leaf.....40&10%
National.....40&10%

SOLDER—See Metals.

SPRINGS, DOOR.

Perfect.
Nos..... 1 2 3 4
Per doz.....80c 35c 40c 84c
Reliance.
Per doz ... light, $1.25; heavy, $2 50
Star.
Per doz .... light, 90c; heavy, $1 35
Torrey's.....per doz.. $1 35
Warner's No. 11 13
Per doz..... 75c $1 35

SQUARES.

Steel and Iron.....70&10%
(Add for bluing, $2.50 per doz., net.)
Miter.
Try.
Try and Bevel.
Try and Miter.
Fox's.....per doz. $5 75
Winterbottom's.....70%

SQUEEZERS, LEMON.

Common Wood.....per doz. $0 70
Porcelain Lined, Wood.. " 1 25
Boss, malleable iron.... " 1 20
Iron Frame, porc'n bowl " 1 90
Iron Frame, glass bowl . " 2 35
Little Giant, tin'd iron . " 4 00
Drum, japanned..... " 3 60
Drum, nickel plated ... " 4 50

STAPLES

Blind.
Barbed.....per lb . . .9½@9½c
Butter Tub..... " .....8 @8½c
Fence—less than carload.
Polished.....per 100 lbs. $2 30
Galvanized..... " 2 60
Netting.
Galvanized.....per 100 lbs. 4 00
Wrought.
Wrought Staples, Hasps and Staples, Hasps, Hooks and Staples, and Hooks and Staples.....60-10&10%
Extra heavy.....75&10%

STEELYARD.

Discount 25%.

STONES.

Ax.
Hindostan.....per lb 5½@7 c
More Grit..... " 9½c
Washita ..... " 17 c
Emery.....60% @60&5%
Oil—Mounted.
Arkansas Hard.....per doz.$23 00
Arkansas Soft..... " 15 50
Hindostan.....per lb 6½@6½
Oil—Unmounted.
Arkansas Hard.....per lb $2 05
Arkansas Soft ..... " 1 10
Lily White..... " 45
Queer Creek..... " 15
Ouachita..... " 38
Washita..... " 26
Sythe.
Black Diamond.....per gro. $8 00
Crescent..... " 4 25
Gem Corundum..... " 7 50
Green Mountain..... " 4 50
La Moille..... " 7 00
Quinnebog..... " 5 00
Red End ..... " 3 75

STOPS, BENCH.

Hotchkiss'.....per doz. $3 50
Stearns'..... " 4 75

STOPPERS, FLUE.

Common.....per doz. $0 40
Crown..... " 45
Gem, flat, painted..... " 85
Gem, cor'd, decorated... " 70
Kirch's..... " 90
Perfect..... " 70@85
Skinner's Common Sense " 80

STOVE PIPE—See Pipe.

STOVE BOARDS—See Boards

STOVE POLISH—See Polish.

STRAPS.

Scoop.....per doz prs., $1 85
Skate..... " " 60@70c

STRETCHERS.

Carpet.
Bullard's.....per doz. $3 00
Excelsior..... " 5 25
Malleable Iron..... " 70
Perfection..... " 6 30
King..... " 4 50
Wire.
N. S. Elwood's.....per doz. $6 00
O. S. Elwood's..... " 6 00
Little Giant..... " 5 75
Safety..... " 10 00
Star Lever..... " 6 25
Canton Tackle Block. " 9 50
Warner's ..... " 6 25

SWIVELS.

Malleable Iron.....per lb. $0 70
Wrought Steel.....per gro. 4 50

TACKS.

American Cut.....90&15%
American Wire.....85&20%
Bill Posters Cut.....90&20%
Blued Carpet.....90&10%
Tinned Carpet.....90&10%
Gimp.....90&10%
Upholsters' Cut.....90&20%
Upholsters' Wire.....90&10%
Double Pointed.....90%
Copper.....per lb. 32c
Canvas Nails.....75&5%
Clout Nails.....75&10%
Hungarian Nails.....80%

TAPES, MEASURING.

Asses' Skin.....40&10%
Bend Leather.....20%
Patent Leather.....20%
Lufkin's Steel.....25%
Lufkin's Metallic.....30%

TEE BEVELS—See Bevels.

THERMOMETERS.

Tin Case.....per doz. 80c@$1 25
Wood Back..... " $2.00@12 00
Glass..... " 12 00

TIES.

Bale.
Single Loop.....80&5%
All other kinds.....70%
Cow—See "Chains."

TOOLS, SAW.

Disston's Universal.....40%
Miniature.
Smith & Hemenway 25%

TRAPS.

Fly.
Ballon.....per doz. $1 25
Harper's..... " 1 35
Game.
Newhouse.....40&10%
New Victor.....70&10%
Mole.
Reddick's.....per doz. $6 00
Mouse and Rat.
Wood Choker ..per doz. holes $0 13
Tin Choker .... " " 75
Delusion.....per doz. 1 15
Marty Rat..... " 6 25
Marty Rat Imitation. " 3 50
Marty Mouse..... " 3 00
Marty Mouse Imitation " 2 00
Hold-em, wire rat.... " 3 75

TROWELS.

Brick.
Clover Leaf.....30%
Brade's.....15&5%
Disston's.....30%
Rose's.....20%
Plasterers'.
Clover Leaf.....40%
Disston's.....25%
W. & McP.....25%

TRUCKS.

Bag.....each, $2 75
Warehouse.....50&10%
No..... 1 2 2
Half Ironed..... $3.00 3.85 5.50
Full Ironed..... 3.45 4.50 6.45

TUBS, WASH

Standard, Wood. Ex.
Nos..... 3 2 1 large
Per doz.....$5.00 6.00 7.00 9.50
Dowell.
Per doz..... 5.35 6.35 7.00 9.50
Cedar.
Per doz..... 6.10 7.10 7.90 10.80
Indurated.
Per doz..... 8.55 9.45 10.80 12.50
Galvanized.
No..... 1 2 3
Per doz.....$6.00 6.75 7.75

TWINE.

Per lb.
3-ply Cotton Wrapping 25c
4 " " " 25c
" " Extra Wrapping.....27c
4 " " " Hvy. Wrapping 25c
4 " " Wrapping on tubes....27c
3 " " " " cones....25c
4 " " " " " 25c
India Hemp, ½-lb. balls 19c
" " ½-lb. " 18c
" " ½-lb. " .....doz. 75c
2-ply Jute, ½-lb. " 14c
3-ply Jute, ½-lb. " 13c
Jute Wrapping, ½-lb. balls.....14c
Jute Wool, 1-lb. balls.....9½c
Seins.
Nos..... 9 12 15
Soft.....per lb 26½ 26 25
Med..... " 26½ 26 25
Hard..... " 27 26½ 26
Staging, ½-lb. ball, size 21.....26½c
" " " " 24.....26c
" " " " 27.....26c
Bagging " " 23c
3-p y "B" in hanks 18c
4- " "B" " 18c
3 " "A" " 27c
3 " Silver Finish, in hanks...37c
Fodder or Lath.
120 strand.....6½c
200 strand.....—c

VISES.

Phœnix.....30%
Phœnix Oval Slide.
Inches..... 2½ 3 3½ 4½
Each..... $1.25 1.50 1.85 2.75
Parker's Parallel.....20%
Parker's Victor.....20%
Parker's Swivel Base.....20%
Parker's Re-inforced 20%
Parker's X Series.....20%
Parker's Combination 20%
No. 110, Bicycle..... " $1 50
No. 500, Royal..... " 32 50
No. 350, Universal..... " 26 00
No. 200, Novelty..... " 28 00
No. 310, Keystone..... " 28 00
No. 100, Rival..... " 28 50
Solid Box.....40&5%
Adams' Mechanics'.....each 2 50
Williamson's Universal.....60%

WARE.

Stove Hollow Ware.
Plain or Unground.....50%
Ground Ware.....45%
Enameled Ware.....33⅓%
Country Hollow Ware, per 100 lbs. $3 00
White Enameled Ware.
Maslin Kettles.....60&10%
Covered Ware.
Tin'd and Turn'd.....35&10%
Enameled.....45&10%
Glue Pots.
Tinned.....25%
Enameled.....30%
Enameled.
Cherry Blossom and Chrysolite..50%

WASH BOARDS—See Boards.

WASHERS.

Standard O G. cast iron . . .per lb. 2½c
Wrought iron in bulk, per lb.:
In. ½ ⅝ ¾ ⅞ 1 1¼ 1½ 1¾ 2
9c 6½c 5c 4½c 4½c 4½c 3½c
Wrought steel in 5-lb. boxes, per lb.:
In. ½ ⅝ ¾ ⅞ 1 1¼ 1½
10 7c 6c 5½c 5c 5c 4½c

WASHING MACHINES—

See Machines.

WEDGES.

Ax.....per doz. $0 30
Galling.....per lb. 10½
Saw..... " 8½

WEANERS.

Calf.
Fuller's, per doz.....$2 00 to $2 50
Tyler's Safety, per doz 1 85 to 2 40
Carroll's, per doz..... 3 00 to 3 75
Standard, per doz..... 3 00
Hoosier, per doz..... 3 50 to 4 60

WEIGHTS.

Hitching.....per lb. 2½c
Sash—f.o.b Chicago....pr ton, 26 50

WHEEL BARROWS.

Common Railroad.....per doz. $17 00
Heavy Railroad..... " 24 00
Panama Steel Tray.... " 30 00
Klondike Steel Tray.. " 28 00

WHEELS.

Corundum.....70&10&5%
Emery.....75&5%
Well. Inches.. 8 10 12 14
Per doz..... $2.40 3.25 4.00 6.00

WIRE.

Barbed. Painted. Galv'd
Carloads .. per 100 lbs. $2.33 $2.63
Less than car " 2.43 2.73
Brass.
In coils.....20%
In 1-lb. spools, new list.....50%
Broom—Tinned . . . 60&10&10&10%
Cable—Same price as Barbed Wire.
Copper.
In coils.....20&10%33⅓%
1-lb. spools, new list.....50&10%
Fence—Smooth.
Nos. 6 to 9, An'eal'd, pr 100 lbs. $2 30
Nos. 6 to 9, Galv'd.. " 2 60
Hair—New List.....50%
Market.
Bright, full bdles.....70&5%
Bright, broken bdles.....70%
Coppered, full bdles.....70%
Coppered, broken bdles.....65&10%
Tinned, full bdles.....75&5%
Tinned, broken bdles.....65&10%
Picture—In coils . . . . 80% @80&10%
In 5-lb. spools.....per lb.....28c
Plain—Small lots..... $2 10
Car lots..... 2 05
Small spools 5c per 100 higher.

WRENCHES.

Acme Standard.....60%
Alligator No. 1.....85cnet
Always Ready.....50%
Agricultural.....75&5%
Ellis Adjustable.....25%
Malleable "S".....per lb. 08c
Malleable..... " 08c
Stillson Pipe.....70%
Bemis & Call's:
Adjustable S, 40&5%; Adjustable S Pipe, 40&5%; Briggs Pattern, 40%; Combination Bright, 50%
Steel Handle Nut.....50&5%
Combination Black.....50&5%
Merrick Pattern.....50&5%
Double End Adj. S.....40&5%

WRINGERS.

No. 22, Guarantee....per doz. $32 50
No. 110, Guarantee.... " 32 50
No. 110, Brighton..... " 23 50

ADVERTISERS' INDEX.

ALPHABETICAL LIST.

Albany Foundry Co. 6
American Sheet & Tin Plate Co. 55
American Steel & Wire Co. 66
Armstrong-Blum Mfg. Co. 58
Auld & Conger Co. 55
Avery Stamping Co. 1
Berger Bros. Co. 62
Berger Mfg. Co. 53
Bertsch & Co. 59
Bishop Hardware Co. 55
Black Silk Stove Polish Works 51
Blumer-Doscher Mfg. Co. 58
Bonnot Co., The 18
Born Steel Range Co. 8
Boynton Furnace Co. 14
Brammer Mfg. Co., H. F. 63
Brauer, A. G., Supply Co. 52
Burgess Soldering Furnace Co. 58
Caldwell Mfg. Co. 62
Canton Art Metal Co. 58
Canton Mfg. Co. 59
Carver File Co. 61
Champion Steel Range Co. 11
Channon-Emery Stove Co. 22
Chicago Stove Works 11
Clark & Co., Geo. M. 12
Clark, Quien & Morse 55
Clayton & Lambert Mfg. Co. 59
Cleveland Castings Pattern Co. 52
Cole Mfg. Co. 9
Columbus Bolt Works 1
Conners, Wm., Paint Mfg. Co. 1
Co-operative Foundry Co. 18
Cope, Geo. W., Stove Pattern Works 52
Denning Wire & Fence Co. 1
Detroit Heating & Lighting Co. 11
Dieckmann, Ferdinand 54
Diener Mfg. Co., Geo. W. 59
Disston, Henry, & Sons 60
Dixon, Jos., Crucible Co. 51
E. I. du Pont de Nemours Powder Co. 65
Economy Stove Co. 10
Eller Mfg. Co. 58
Enterprise Mfg. Co. of Pa. 64
Enterprise Pattern Works 52
Faultless Malleable Stove Works 10
Ferrosteel Co. 21
Follansbee Bros. Co. 68
Forshaw of St. Louis 52
Foster Stove Co. 4
Fox Furnace Co. 3
Foy, E. A., & Co. 51
Friedley-Voshardt Co. 59
Gerner Stove Co. 5
Globe Manufacturing Co. 62
Globe Ventilator Co. 68
Gray's School 56
Green Co., A. H. 63
Green Foundry & Furnace Works 16
Griffiths Charcoal Iron Mills 54
Harrington & King Perforating Co. 62
Haynes-Langenberg Mfg. Co. 12
Hemp & Co. 68
Henry & Scheible Co. 18
Hessler Co., H. E. 62
Hooper, C. N. 17
Howes Co., S. M. 60
Hussey & Co., C. G. 56
Ideal Epworth Acetylene Co. 11
Inland Steel Co. 56
Iwan Bros. 1
Kees Mfg. Co., F. D. 17
Kellogg-Mackay Co. 17
Kelsey Heating Co. 2
Keystone Nail Co. 68
Kimball Bros. Co. 11
Kinne Mfg. Co. 19
Lawson Mfg. Co. 1
Lenox Hotel 51
Lufkin Rule Co. 61
Magee Furnace Co. 15
Merchant & Evans Co. 53
Meyer & Bro. Co., F. 20
Meyer Fdy. & Mfg. Co. 58
Michigan Safety Furnace Pipe Co. 19
Milbradt Mfg. Co. 61
Milwaukee Corrugating Co. 56
Monroe Foundry & Furnace Co. 17
Moon, Edw. B. 52
Mueller, L. J., Furnace Co. 17
Mullins Co., W. H. 57
Munsell & Co., Eugene 10
Napanee Iron Works 59
National Sheet Metal Roofing Co. 58
Niagara Machine & Tool Works 59
Nickel Plate Stove Polish Co. 52
North Bros. Mfg. Co. 61
Northwestern Stove Repair Co. 52
Ohio Stove Co. 7
Parker Co., Chas. 60
Peck-Hammond Co. 15
Peck, H. E. 50
Philadelphia Lawn Mower Co. 64
Pickett Hdw. Co., Ltd. 19
Pittsburgh Steel Co. 62
Quality Stove & Range Co. 11
Quincy Pattern Co. 52
Ralt & Co., Walter S. 13
Ringen Stove Co. 9-59
Robinson Mfg. Co., J. M. 67
Rochester Radiator Co. 18
Rock Island Tool Co. 61
Ruby Chemical Co. 58
Schoedinger Co., F. O. 57
Schwab, R. J. & Sons Co. 15
Smith & Anthony Co. 10
Smith & Hemenway Co. 61
South Erie Iron Works 7
Sperry, D. R. Co. 52
Sprague Foundry & Mfg. Co. 18
Standard Arms Co. 67
Standard-Gillett Light Co. 67
Standard Horse Nail Co. 62
Stanley Rule & Level Co. 60
Star Bucket Pump Co. 68
Star Enameling & Stamping Co. 68
Stark Rolling Mill Co. 55
Stove & Range Co. of Pittsburgh 2
Streator Metal Stamping Co. 60
Stuber & Kuck 68
Sullivan-Geiger Co. 68
Sykes Steel Roofing Co. 57
Taylor & Boggis Fdy. Co. 65
Taylor Co., N. & G. 68
Tuttle & Bailey Mfg. Co. 21
XXth Century Heat. & Light Co. 19
Union Metallic Cartridge Co. 65
U. S. Stove Repair Co. 52
Utica Heater Co. 14
Van Range Co., John 8
Vedder Pattern Works 52
Wagner, C. De Witt 57
Walworth Run Fdy. Co. 21
Ward-Dickey Steel Co. 56
Warren, J. D. 63
Weiss, H. & Co. 59
Weller Pattern Co. 52
Wheeling Corrugating Co. 54
Whitacre, J. E. Mfg. Co. 57
White Lily M'f'g. Co. 63
Willard, Wm. G. 10
Wooden Ventilator Co., The 21
Youngstown Furnace & Supply Co. 16

CLASSIFIED LIST.

Ammunition.

Standard Arms Co., Wilmington, Del.
Union Metallic Cartridge Co., Bridgeport, Conn.

Augers—Post Hole.

Iwan Bros. South Bend, Ind.

Barb Wire.

American Steel & Wire Co., Chicago, Ill.

Bending Machines.

Napanee Iron Wks., Napanee, Ind.

Boilers—Steam.

Boynton Furnace Co., Chicago, Ill.
Kellogg-Mackay Co., Chicago, Ill.
Magee Furnace Co., Boston, Mass.; Chicago, Ill.
Mueller, L. J., Milwaukee, Wis.
XXth Century Heat. & Vent. Co., Akron, O.
Utica Heater Co., Utica, N. Y.

Boiler Handles.

Berger Bros. Co., Philadelphia, Pa.

Bolts.

Columbus Bolt Works, Columbus, O.

Boxes—Hardware.

Green Co., A. H., New York, N. Y.

Brackets—Shelf & Sink.

Hessler Co., H. E., Syracuse, N. Y.

Brakes—Cornice.

Bertsch & Co., Cambridge City, Ind.
Niagara Machine & Tool Works, Buffalo, N. Y.
Robinson Mfg. Co., J. M., Cincinnati, O.

Brass and Copper.

Hussey & Co., C. G., Pittsburg, Pa.

Cans.

Stuber & Kuck, Peoria, Ill.

Carpenters' Tools.

Disston & Sons, Henry, Philadelphia, Pa.
Lawson Mfg. Co., Chicago, Ill.
North Bros. Mfg. Co., Philadelphia, Pa.
Parker Co., Chas. New York, N. Y.; Meriden, Conn.
Rock Island Tool Co., Rock Island, Ill.
Smith & Hemenway Co., New York, N. Y.
Stanley Rule and Level Co., New Britain, Conn.

Carpet Sweepers.

Streator Metal Stamping Co., Streator, Ill.

Carriage Forgings.

Columbus Bolt Works, Columbus, O.

Ceilings.

Berger Mfg. Co., Canton, O.
Canton Art Metal Co., Canton, O.
Canton Mfg. Co., Canton, O.
Eller Mfg. Co., Canton, O.
Friedley-Voshardt Co., Chicago, Ill.
Milwaukee Corrugating Co., Milwaukee, Wis
Mullins Co., W. H., Salem, O.
Schoedinger, F. O., Columbus, O.
Wheeling Corrugating Co., Wheeling, W. Va.

Cement.—Roofing.

Auld & Conger Co., Cleveland, O.
Conners, Wm., Paint Mfg. Co., Troy, N. Y.

Chimney Tops.

Iwan Bros., South Bend, Ind.

Collar Edging Rolls.

Wagner, C. DeWitt, Cedar Rapids, Ia.

Conductor Hangers.

Berger Bros. Co., Philadelphia, Pa.

Conductor Pipe.

Berger Mfg. Co., Canton, O.
Canton Art Metal Co., Canton, O.
Canton Mfg. Co., Canton, O.
Clark, Quien & Morse, Peoria, Ill.
Eller Mfg. Co., Canton, O.
Milwaukee Corrugating Co., Milwaukee, Wis.

Copper and Brass.

Hussey & Co., C. G., Pittsburg, Pa.

Corn Cribs.

Denning Wire & Fence Co., Cedar Rapids, Ia.

Cornices.

Berger Mfg. Co., Canton, O.
Canton Art Metal Co., Canton, O.
Canton Mfg. Co., Canton, O.
Eller Mfg. Co., Canton, O.
Milwaukee Corrugating Co., Milwaukee, Wis.
Mullins Co., W. H., Salem, O.
Schoedinger, F. O., Columbus, O.

Cornice Brakes.

Bertsch & Co., Cambridge City, Ind.
Dreis & Krump Mfg. Co., Chicago, Ill.
Niagara Machine & Tool Works, Buffalo, N. Y.
Robinson Mfg. Co., J. M., Cincinnati, O.

Crimping Machines.

Robinson Mfg. Co., J. M., Cincinnati, O.

Crimping Rolls.

Wagner C. DeWitt, Cedar Rapids, Ia.

Cutlery.

Smith & Hemenway Co., New York, N. Y.

Cut-Offs—Rain Water.

Milwaukee Corrugating Co., Milwaukee, Wis.
Sullivan-Geiger Co., The, Indianapolis, Ind.

Dampers.

Howes Co., S. M., Boston, Mass.
Taylor & Boggis Fdy. Co., Cleveland, O.

Door Holders.

Caldwell Mfg. Co., Rochester, N. Y.

Eaves Trough.

Berger Mfg. Co., Canton, O.
Canton Art Metal Co., Canton, O.
Canton Mfg. Co., Canton, O.
Eller Mfg. Co., Canton, O.
Milwaukee Corrugating Co., Milwaukee, Wis.
Mullins Co., W. H., Salem, O.
Schoedinger, F. O., Columbus, O.
Whitacre, J. E. Mfg. Co., Rockford, Ill.
Wheeling Corrugating Co., Wheeling, W. Va.

Eave Trough Hangers.

Canton Mfg. Co., Canton, O.

Elbows—Conductor Pipe.

Canton Art Metal Co., Canton, O.
Canton Mfg. Co., Canton, O.
Dieckmann, Ferdinand, Cincinnati, O.
Eller Mfg. Co., Canton, O.
Milwaukee Corrugating Co., Milwaukee, Wis.
Wheeling Corrugating Co., Wheeling, W. Va.

Electro & Nickel Plating Outfits.

Zucker & Levett & Loeb Co., New York, N. Y.

Elevators.

Kimball Bros. Co., Council Bluffs, Ia.

Enameled Ware.

Star Enameling & Stamping Co., Pittsburg, Pa.

Explosives.

E. I. du Pont de Nemours Powder Co. Wilmington, Del.

Fencing—Wire.

American Steel & Wire Co., Chicago, Ill.
Denning Wire & Fence Co., Cedar Rapids, Ia.
Pittsburgh Steel Co., Pittsburgh, Pa.

Files.

Carver File Works, Philadelphia, Pa.
Disston, Henry & Sons, Philadelphia, Pa.

Firearms.

Standard Arms Co., Wilmington, Del.

Fixtures Store.

Warren Mfg. Co., Chicago, Ill.

Flue Stoppers.

Stuber & Kuck, Peoria, Ill.

Food Choppers.

Enterprise Mfg. Co. of Pa., Philadelphia, Pa.

Forming Tools.

Bertsch & Co., Cambridge City, Ind.
Niagara Machine & Tool Works, Buffalo, N. Y.

Furnace Cement.

Connors Paint Mfg. Co., Troy, N. Y.

Furnaces—Hot Air.

Bonnot Co., The, Canton, O.
Boynton Furnace Co., Chicago, Ill.
Co-operative Fdy. Co., Rochester, N. Y.
Chicago, Ill.
Fox Furnace Co., Elyria, O.
Gerner Stove Co., Erie, Pa.
Green Fdy. & Fur. Wks., Des Moines, Ia.
Haynes-Langenberg Mfg. Co., St. Louis, Mo.
Henry & Scheible Co., Cleveland, O.
Kelsey Heating Co., Syracuse, N. Y.
Magee Furnace Co., Boston, Mass., Chicago, Ill.
Monroe Fdy. & Furn. Co., Monroe, Mich.
Pickett Hdw. Co., The, Warren, Pa.
Schwab, R. J., & Sons Co., Milwaukee, Wis.
Smith & Anthony Co., Boston, Mass.
Sprague Fdy. & Mfg. Co., Des Moines, Ia.
Stove & Range Co. of Pittsburgh, Pittsburgh, Pa.
XXth Century Heat. & Vent. Co., Akron, O.
Utica Heater Co., Utica, N. Y.
Youngstown Furn. & Supply Co., Niles, O.

Furnaces—Soldering.

Burgess Soldering Furnace Co., Columbus, O.
Clayton & Lambert Mfg. Co., Detroit, Mich.
Siener Mfg. Co., Geo. W., Chicago, Ill.
Meyer Fdy. & Mfg. Co., South Bend, Ind.
Ringen Stove Co., St. Louis, Mo.

Furnace Pipe and Fittings.

Green Fdy. & Furn. Wks., Des Moines, Ia.
Meyer & Bro. Co., F., Peoria, Ill.
Michigan Safety Furnace Pipe Co., Detroit, Mich.

Furnace Repairs.

Forshaw of St. Louis, St. Louis, Mo.
Northwestern Stove Repair Co., Chicago, Ill.

Furnace Rings.

Walworth Run Fdy. Co., Cleveland, O.

Galvanized Ware.

Wheeling Corr. Co., Wheeling, W. Va.

Gas Machines.

Whitacre Mfg. Co., J. E., Rockford, Ill.

Gas Stoves.

Economy Stove Co., Cleveland, O.
Stove and Range Co. of Pittsburgh, Pittsburgh, Pa.

Gasoline Stoves.

Ringen Stove Co., St. Louis, Mo.

Grain Bins.

Denning Wire & Fence Co., Cedar Rapids, Ia.

Hardware Jobbers.

Clark, Quien & Morse, Peoria, Ill.

Hardware Specialties.

Bishop Hardware Co., Dowagiac, Mich.
Butler Bros., Chicago, Ill.
Caldwell Mfg. Co., Rochester, N. Y.
Hessler Co., H. E., Syracuse, N. Y.
Kees Mfg. Co., F. D., Beatrice, Neb.
Smith & Hemenway Co., New York, N. Y.
Taylor & Boggis Fdy. Co., Cleveland, O.

Hinges.

Lawson Mfg. Co., Chicago, Ill.

Hollow Ware.

Avery Stamping Co., Cleveland, O.
Sperry, D. R., & Co., Batavia, Ill.

Horse Nails.

Standard Horse Nail Co., New Brighton, Pa.

Horse Shoes.

American Steel & Wire Co., Chicago, Ill.

Hotels.

Lenox Hotel, Buffalo, N. Y.

Ice Cream Freezers.

North Bros. Mfg. Co., Philadelphia, Pa.

Iron Enamel.

Black Silk Stove Polish Wks., Sterling, Ill.
Nickel Plate Stove Polish Co., Chicago, Ill.

Kitchen Utensils.

Avery Stamping Co., Cleveland, O.
Enterprise Mfg. Co. of Pa., Philadelphia, Pa.
Kinne Mfg. Co., Minneapolis, Minn.
Star Enameling & Stamping Co., Pittsburgh, Pa.

Ladders—Shelf.

Milbradt Mfg. Co., St. Louis, Mo.

Lawn Mowers.

Philadelphia Lawn Mower Co., Philadelphia, Pa.

Lighting.

Ideal Epworth Acetylene Co., Johnstown, Pa., Waterloo, Ia.
Standard-Gillett Light Co., Chicago, Ill.

Lighting Systems.

Detroit Heating & Lighting Co., Detroit, Mich.
Standard-Gillett Light Co., Chicago, Ill.
Whitacre Mfg. Co., J. E., Rockford, Ill.

Lightning Rod.

Foy, Edw. A., & Co., Cincinnati, O.

Metal—Perforated.
Harrington & King Perforating Co., Chicago, Ill.

Metal Polish.
Black Silk Stove Polish Wks., Sterling, Ill.
Nickel Plate Stove Polish Co., Chicago, Ill.

Metal Shingles.
Canton Art Metal Co., Canton, O.
Milwaukee Corrugating Co., Milwaukee, Wis.
National Sheet Metal Roofing Co., Jersey City, N. J.

Mica.
Brauer Supply Co., A. G., St. Louis, Mo.
Forshaw of St. Louis, St. Louis, Mo.
Munsell & Co., Eugene, New York and Chicago.

Miters.
Whitacre, J. E., Mfg. Co., Rockford, Ill.

Nails and Tacks—Copper.
Hussey & Co., C. G., Pittsburg, Pa.
Keystone Nail Co., Pittsburg, Pa.

Nuts.
Columbus Bolt Works, Columbus, O.

Paints and Paint Specialties.
Connors, Wm., Paint Mfg. Co., Troy, N. Y.
Dixon, Jos., Crucible Co., Jersey City, N. J.

Pencils.
Dixon, Jos., Crucible Co., Jersey City, N. J.

Perforated Metal.
Harrington & King Perforating Co., Chicago, Ill.

Pipe—Furnace.
Meyer & Bro. Co., F., Peoria, Ill.
Michigan Safety Furnace Pipe Co., The, Detroit, Mich.

Plungers.
Berger Bros. Co., Philadelphia, Pa.

Post Hole Diggers.
Iwan Mfg. Co., South Bend, Ind.

Powder.
E. I. du Pont de Nemours Powder Co., Wilmington, Del.

Pumps.
Star Bucket Pump Co., St. Louis, Mo.

Punches.
Armstrong-Blum Mfg. Co., Chicago, Ill.
Bertsch & Co., Cambridge City, Ind.
Napanee Iron Works, Napanee, Ind.
Niagara Machine & Tool Works, Buffalo, N. Y.
Robinson Mfg. Co., J. M., Cincinnati, O.
Weiss & Co., H., New York, N. Y.

Putty—Stove.
Connors, Wm., Paint Mfg. Co., Troy, N. Y.

Radiators.
Kellogg-Mackay Co., Chicago, Ill.

Rasps.
Disston, Henry, & Sons, Philadelphia, Pa.
Carver File Works, Philadelphia, Pa.

Razors.
Smith & Hemenway Co., New York, N. Y.

Registers.
Excelsior Steel Furnace Co., Chicago, Ill.
Ferrosteel Co., Cleveland, O.
Henry & Scheible Co., Cleveland, O.
Mueller, L. J., Milwaukee, Wis.
Schwab & Sons Co., Milwaukee, Wis.
Tuttle & Bailey Mfg. Co., New York, N. Y.
Walworth Run Fdy. Co., Cleveland, O.

Rifles.
Standard Arms Co., Wilmington, Del.

Rivets.
Columbus Bolt Works, Columbus, O.

Roasters.
Wheeling Corrugating Co., Wheeling, W. Va.

Roofers' Supplies.
Auld & Conger Co., Cleveland, O.

Roofing—Iron and Steel.
American Sheet & Tin Plate Co., Pittsburgh, Pa.
Berger Mfg. Co., Canton, O.
Canton Art Metal Co., Canton, O.
Canton Mfg. Co., Canton, O.
Eller Mfg. Co., Canton, O.
Follansbee Bros. Co., Pittsburg, Pa.
Friedley & Voshardt Co., Chicago, Ill.
Griffiths Charcoal Iron Mills, Washington, Pa.
Inland Steel Co., Chicago, Ill.
Merchant & Evans Co., Philadelphia, Pa.
Milwaukee Corrugating Co., Milwaukee, Wis.
Nat'l Sheet Metal Roof. Co., Jersey City, N. J.
Schoedinger, F. O., Columbus, O.
Sykes Steel Roof. Co., Chicago, Ill.
Taylor Co., N. & G., Philadelphia, Pa.
Wheeling Corrugating Co., Wheeling, W. Va.

Roofing Cement.
Auld & Conger Co., Cleveland, O.
Connors Paint Mfg. Co., The Wm., Troy, N. Y.

Roof Paint.
Dixon, Jos., Crucible Co., Jersey City, N. J.

Rope—Wire.
American Steel & Wire Co., Chicago, Ill.

Rules.
Lufkin Rule Co., Saginaw, Mich.

Sausage Stuffers.
Enterprise Mfg. Co. of Pa., Philadelphia, Pa.

Saw Sets and Saws.
Disston, Henry, & Sons, Philadelphia, Pa.
Smith & Hemenway Co., New York, N. Y.

Schools — For Sheet Metal Pattern Drafting.
Gray's School, New York, N. Y.

Screens—Perforated Metal.
Harrington & King Perforating Co., Chicago, Ill.

Screws.
Columbus Bolt Works, Columbus, O.

Screw Drivers.
North Bros. Mfg. Co., Philadelphia, Pa.

Shears.
Bertsch & Co., Cambridge City, Ind.
Napanee Iron Works, Napanee, Ind.
Robinson Mfg. Co., J. M., Cincinnati, O.
Wagner, C. De Witt, Cedar Rapids, Ia.

Sheets—Black and Galvanized.
American Sheet & Tin Plate Co., Pittsburgh, Pa.
Berger Mfg. Co., Canton, O.
Eller Mfg. Co., Canton, O.
Griffiths Charcoal Iron Mills, Washington, Pa.
Inland Steel Co., Chicago, Ill.
Stark Rolling Mill Co., Canton, O.
Sykes Steel Roof. Co., Chicago, Ill.
Taylor & Co., N. & G., Philadelphia, Pa.
Wheeling Corrugating Co., Wheeling, W. Va.

Sheets—Planished.
American Sheet & Tin Plate Co., Pittsburg, Pa.
Berger Mfg. Co., Canton, O.
Eller Mfg. Co., Canton, O.
Follansbee Bros., Pittsburg, Pa.
Griffiths Charcoal Iron Mills, Washington, Pa.
Inland Steel Co., Chicago, Ill.
Stark Rolling Mill Co., Canton, O.
Sykes Steel Roof. Co., Chicago, Ill.
Taylor Co., N. & G., Philadelphia, Pa.
Ward-Dickey Steel Co., Indiana Harbor, Ind.

Sheets—Steel.
American Sheet & Tin Plate Co., Pittsburgh, Pa.
American Steel & Wire Co., Chicago, Ill.
Berger Mfg. Co., Canton, O.
Eller Mfg. Co., Canton, O.
Follansbee Bros., Pittsburg, Pa.
Griffiths Charcoal Iron Mills, Washington, Pa.
Inland Steel Co., Chicago, Ill.
Stark Rolling Mill Co., Canton, O.
Sykes Steel Roof. Co., Chicago, Ill.
Taylor Co., N. & G., Philadelphia, Pa.

Sheet Metal Ornaments.
Berger Mfg. Co., Chicago, Ill.
Friedley-Voshardt Co., Chicago, Ill.
Milwaukee Corrugating Co., Milwaukee, Wis.
Mullins Co., W. H., Salem, O.
Schoedinger, F. O., Columbus, O.

Sheet Metal Patterns.
Gray's School, New York, N. Y.

Shelf Boxes.
Green Co., A. H., The, New York, N. Y.

Shelving.
Warren Mfg. Co., J. D., Chicago, Ill.

Shovels.
Avery Stamping Co., Cleveland, O.

Siding.
Milwaukee Corrugating Co., Milwaukee, Wis.

Sifters.
Stuber & Kuck, Peoria, Ill.

Skylights.
Canton Art Metal Co., Canton, O.
Eller Mfg. Co., Canton, O.
Milwaukee Corrugating Co., Milwaukee, Wis.

Skylight Gearing.
Weiss, H., & Co., New York, N. Y.

Slate Roofing.
Auld & Conger Co., Cleveland, O

Slating Nails.
Hussey & Co., C. G., Pittsburgh, Pa.

Soldering Fluxes.
Ruby Chemical Co., Johnston, O.

Squares—Machinists'.
Disston, Henry, & Sons, Philadelphia, Pa.

Stampings—Sheet Metal.
Avery Stamping Co., Cleveland, O.

Statuary.
Friedley-Voshardt Co., Chicago, Ill.

Steel.
American Steel & Wire Co., Chicago, Ill.

Stoves and Ranges.
Albany Foundry Co., Albany, N. Y.
Belleville Stove & Range Co., Belleville, Ill.
Born Steel Range Co., Cleveland, O.
Champion Steel Range Co., Cleveland, O.
Chauncey-Emery Stove Co., Quincy, Ill.
Chicago Stove Works, Chicago, Ill.
Cole Mfg. Co., Chicago, Ill.
Co-operative Fdy. Co., Rochester, N. Y., Chicago, Ill.
Economy Stove Co., Cleveland, O.
Faultless Malleable Stove Wks., St. Charles, Ill.
Foster Stove Co., Ironton, O.
Fox Furnace Co., Elyria, O.
Germer Stove Co., Erie, Pa.
Magee Furnace Co., Boston, Mass.; Chicago, Ill.
Ohio Stove Co., Portsmouth, O.
Quality Stove & Range Co., Belleville, Ill.
Ringen Stove Co., St. Louis, Mo.
Smith & Anthony Co., Boston, Mass.
South Erie Iron Works, Erie, Pa.
Stove & Range Co. of Pittsburgh, Pittsburgh, Pa.
Van Range Co., John, Cincinnati, O.
Willard, Wm. G., St. Louis, Mo.

Stove Mats.
Stuber & Kuck, Peoria, Ill.

Stove Patterns.
Cleveland Castings Pattern Co., Cleveland, O.
Cope Pattern Works, Geo. W., Detroit, Mich.
Enterprise Pattern Works, Detroit, Mich.
Quincy Pattern Co., Quincy, Ill.
Vedder Pattern Works, Troy, N. Y.
Weller Pattern Co., Quincy, Ill.

Stove Pipe.
Excelsior Steel Furnace Co., Chicago, Ill.
Hemp & Co., St. Louis, Mo.
Kinne Mfg. Co., Minneapolis, Minn.

Stove Pipe Crimpers.
Blumer-Doscher Mfg. Co., Brooklyn, N. Y.

Stove Pipe Joints.
Kinne Mfg. Co., Minneapolis, Minn.

Stove Pipe Radiators.
Rochester Radiator Co., Rochester, N. Y.

Stove Pipe Thimbles.
Stuber & Kuck, Peoria, Ill.

Stove Polish.
Black Silk Stove Polish Wks., Sterling, Ill.
Brauer Supply Co., A. G., St. Louis, Mo.
Forshaw of St. Louis, St. Louis, Mo.
Nickel Plate Stove Polish Co., Chicago, Ill.

Stove Putty.
Connors Paint Mfg. Co., Wm., Troy, N. Y.
Dixon, Jos., Crucible Co., Jersey City, N. J.

Stove Repairs.
Brauer, A. G., Supply Co., St. Louis, Mo.
Forshaw of St. Louis, St. Louis, Mo.
Northwestern Stove Repair Works, Chicago, Ill.
U. S. Stove Repair Co., Minneapolis, Minn.

Sugar Kettles.
Sperry, D. R., Co., Batavia, Ill.

Supplies—Stove Dealers.
Brauer, A. G., Supply Co., St. Louis, Mo.

Tacks—Carpet.
American Steel & Wire Co., Chicago, Ill.

Tapes.
Lufkin Rule Co., Saginaw, Mich.

Technologist.
Hooper, C. N., Dubuque, Iowa.

Telephone Wire.
American Steel & Wire Co., Chicago, Ill.

Tin—Perforated.
Harrington & King Perforating Co., Chicago, Ill.

Tinners' Furnaces.
Burgess Soldering Furnace Co., Columbus, O.
Clayton & Lambert Mfg. Co., Detroit, Mich.
Siener Mfg. Co., Geo. W., Chicago, Ill.
Meyer Fdy. & Mfg. Co., South Bend, Ind.
Ringen Stove Co., St. Louis, Mo.

Tinners' Tools.
Armstrong-Blum Mfg. Co., Chicago, Ill.
Auld & Conger Co., Cleveland, O.
Berger Bros. Co., Philadelphia, Pa.
Bertsch & Co., Cambridge City, Ind.
Blumer-Doscher Mfg. Co., Brooklyn, N. Y.
Lufkin Rule Co., Saginaw, Mich.
Napanee Iron Works, Napanee, Ind.
Niagara Machine & Tool Works, Buffalo, N. Y.
Robinson Mfg. Co., J. M., Cincinnati, O.
Wagner, C. Dewitt, Cedar Rapids, Ia.
Weiss & Co., H., New York, N. Y.

Tinplate.
American Sheet & Tin Plate Co., Pittsburgh, Pa.
Eller Mfg. Co., Canton, O.
Follansbee Bros. Co., Pittsburgh, Pa.
Merchant & Evans Co., Philadelphia, Pa.
Taylor & Co., N. & G., Philadelphia, Pa.
Wheeling Corrugating Co., Wheeling, W. Va.

Tinware Trimmings.
Berger Bros. Co., Philadelphia, Pa.

Toasters.
Kinne Mfg. Co., Minneapolis, Minn.

Tools, Etc.
North Bros. Mfg. Co., Philadelphia, Pa.
Parker Co., Chas., New York, N. Y.; Meriden, Conn.
Rock Island Tool Co., Rock Island, Ill.
Stanley Rule & Level Co., New Britain, Conn.

Tools—See Carpenters' Tools.
Tools—Linemen's.
Smith & Hemenway Co., New York, N. Y.

Torches.
Clayton & Lambert Mfg. Co., Detroit, Mich.

Trowels.
Avery Stamping Co., Cleveland, O.
Disston, H., & Sons, Inc., Philadelphia, Pa.
Griffin Mfg. Co., Erie, Pa.

Tubing—Heavy Tin.
Dieckmann, Ferdinand, Cincinnati, O.

Ventilators Wooden.
Wooden Ventilator Co., The East Palestine, O.

Ventilators.
Canton Art Metal Co., Canton, O.
Canton Mfg. Co., Canton, O.
Eller Mfg. Co., Canton, O.
Friedley & Voshardt Co., Chicago, Ill.
Globe Ventilator Co., Troy, N. Y.
Iwan Mfg. Co., South Bend, Ind.
Merchant & Evans Co., Philadelphia, Pa.
Milwaukee Corrugating Co., Milwaukee, Wis.

Washers.
Columbus Bolt Works, Columbus, O.

Washing Machines.
Brammer Mfg. Co., H. F., Davenport, Ia.
Globe Mfg. Co., Perry, Ia.
White Lily Mfg. Co., Davenport, Ia.

Windows—Fireproof.
Merchant & Evans Co., Philadelphia, Pa.
Mullins Co., W. H., Salem, O.

Wire.
American Steel & Wire Co., Chicago, Ill.

Wire Goods.
Denning Wire & Fence Co., Cedar Rapids, Ia.
Pittsburg Steel Co., Pittsburg, Pa.

Wrenches.
Parker Co., Chas., New York, N. Y.; Meriden, Conn.
Rock Island Tool Co., Rock Island, Ill.

Wants and Sales

For paid Yearly subscribers THE AMERICAN ARTISAN will insert under this head advertisements of six lines WITHOUT CHARGE for employers wishing to secure employes, persons seeking situations, parties desiring to purchase a business, business for sale, partners wanted, to exchange, etc. Not exceeding fifty words, the price to non-subscribers is one dollar, payable in advance. Those who respond to these announcements will please mention that they "READ THE ADVERTISEMENT IN THE AMERICAN ARTISAN."

BUSINESS CHANCES

PATENTS OFFICIAL copy "PATENT LAWS" United States sent on receipt ten cents stamps.
HUBERT E. PECK, Patent Attorney, 629 F. Street, Washington, D. C.

For Sale—Tin shop, roofing and furnace business located in northern Ohio town of 50,000. Employ from six to eight men. Best location. Price reasonable. Reason for selling, have other business which takes our time. Address T-14, care THE AMERICAN ARTISAN, 355 Dearborn St., Chicago, Ill. 15-ufn

Wanted to trade good Western land for stock of hardware. Address W. H. Drinkern, Beloit, Kansas. 15-2t

Wanted to buy a first class Tin shop in some good country town in Nebraska that is doing good business. Would like to take possession about Jan. 1st or Feb. 1st. Address T-13, care THE AMERICAN ARTISAN, 355 Dearborn St., Chicago, Ill. 15-3t

For Sale—The only sheet metal and plumbing business in a fast growing town of 2000. Tools and stock all in good shape. About $700 buys a good money-making business. Address Box 326, Syracuse, Indiana. 15-ufn

For Sale—Clean stock of hardware, stoves, paint, implements and vehicles. Best location in hustling up-to-date town in Northern Indiana, surrounded by a rich farming country. Will invoice about $12,000. Can be reduced to $7,500. Established 1883 and has always been a good paying business. For further information address T-11, care of THE AMERICAN ARTISAN, 355 Dearborn St., Chicago, Ill. 14-ufn

For Sale—Good, clean up-to-date stock of hardware and groceries in good lively town of 750 with only tinshop in town and doing good business. Stock will invoice about $5,000. Good reasons for selling. Address P. O. Box 287, Whiting, Ia. 14-3t

For Sale—On account of other interests will sell $9,000.00 stock of clean hardware with excellent plumbing business, located in hustling Oklahoma town of five thousand people. Terms, strictly cash. Address T-9, care of THE AMERICAN ARTISAN, 355 Dearborn St., Chicago, Ill. 14-ufn

For Sale—A stock of hardware, stoves, paints, glass, tools and shelf hardware. Established 1870. Reason for selling, age and wishing to retire. The location is the best in the city. Stock about $3,500. Will rent or sell building and warehouse. Address P. O. Box 102, Glencoe, Minn. 14-3t

For Sale—My stock of hardware, with tinner's tools and pump business. Invoices about $3,000. Good reason for selling. A great chance for the right one. Address H. B. Gardner, Salem, Wis. 13-3t

To Exchange — A 240-acre improved farm in Southern Minnesota for stock of hardware in good town or city. Would take stock that would invoice from $5,000 to $10,000. Not particular as to location. Let me hear from you. Address W. H. L. Donaldson, Rochester, Minn. 13-3t

For Sale—$7,000 stock of hardware with tin shop. Good Indiana county seat. Five factories and excellent farming country. Established over 30 years. A clean-cut proposition for cash. Valid reason for selling. If you mean business address T-3, care of THE AMERICAN ARTISAN, 355 Dearborn St., Chicago, Ill. 13-3t

For Sale—Furnace and tin business in a city of 70,000. Capitol of Missouri River state. All tools, stock and trade. Business in 1908 over $17,000. Have averaged 100 furnaces per year for last five years. Reason for selling, wife must have change of climate. Address T-8, care of THE AMERICAN ARTISAN, 355 Dearborn St., Chicago, Ill. 13-3t

TINNER'S TOOLS.

For Sale—One hundred dollars buys set of tinner's tools. Never used. All Pickston make. H. B. Gardner, Salem, Wis. 13-3t

HELP WANTED.

Wanted—An ordinary jobbing tinner. He can have good position, steady work and all the wages a man is worth. Address J. P. Lynott, Louisiana, Mo. 15-3t

Help Wanted—Wood Pattern Makers: Man competent to give out work and manage a gang of seven men on heating stove patterns. Also, a man to make boards on standard tools, and look after gang of five men covering same. Steady work. Gobeille Pattern Company, Niagara Falls, N. Y. 15-2t

Tinner Wanted—I will pay 30c per hour and give steady work to man that can make good. Don't write unless you are ready to come at once. Ole Nelson, Mankato, Minn. 14-3t

Wanted—Good tinner and furnace man at once. Good job for right man. Must be sober and industrious. W. H. Hartley & Sons, Cambridge, O. 14-3t

Tinner Wanted—A good man wanted immediately who can do all the work that comes to a country shop. Wm. Weidenbach, Manteno, Ill. 14-3t

Wanted At Once—A tinner and furnace man. Call or write at once to C. Scherer & Son, Naperville, Ill., only 30 miles west of Chicago on the C., B. & Q. R. R. 14-3t

Wanted—Tinner; one that is a hustler and wants to hold down a good job; work eight hours. State in first letter wages wanted, married or single. Frank Berryhill, Ardmore, Okla. 14-3t

Wanted—All around tinner and furnace man; one who can do some plumbing preferred. Can guarantee steady employment to right man. Address Wm. O. Lee & Co., Huntley, Ill. 14-3t

Wanted At Once—Two or three tinners for all kinds of tin and furnace work. C. Miller & Son, Charles City, Ia. 14-2t

Wanted—Good reliable hardware clerk. Married man preferred and steady position to the right man. Must give good references. Address G. A. Sayers, Cedar Rapids, Iowa. 14-3t

Wanted—One or two first-class tinners and plumbers. Would rather that they be familiar with both trades if possible. None but sober men need apply. Address W. J. Wells & Company, Decatur, Ill. 13-3t

Wanted—Tinner and plumber combined. Good wages and steady work. Address M. J. McCarthy, Glenwood Springs, Colo. 13-3t

Wanted—Tinner and furnace man at once. Steady work for a competent man. Address M. Gensmer & Son, Caledonia, Minn. 13-3t

Wanted—A good first-class tinner who understands heating and plumbing. A good permanent position to right man. Must be well recommended. State full particulars in first letter. Geo. P. Hindert, Minonk, Ill. 13-3t

Wanted — Experienced, hustling stove salesman for 1910 to travel in Wisconsin and Iowa. Large established line. Address T-7, care of THE AMERICAN ARTISAN, 355 Dearborn St., Chicago, Ill. 13-3t

Wanted—Handy man around a tin shop and hardware store. One that can do some tin work and set up stoves, etc. Address E. J. Ketcham, West Duluth, Minn. 13-ufn

Wanted—Experienced tinners and sheet metal workers. Permanent position for the right men. Write Barnes & Nuss, Company, Grand Forks, North Dakota, giving experience, age, whether married or single, and where last employed. 11-ufn

SITUATIONS WANTED.

Situation Wanted—By January 1st, by retail hardwareman; eleven years' experience. Progressive, hard working, capable salesman. Department ability in stoves, tools, paint and builders' hardware. Exceptional reference. Address T-15, care of THE AMERICAN ARTISAN, 355 Dearborn St., Chicago, Ill. 15-3t

Situation Wanted—A first class tinner, plumber and steamfitter would like to take charge of those lines of work for a large mercantile firm, either on a straight salary or working interest basis. Parties wishing a reliable man would do well to write L. B. 303, Harlowton, Montana. 15-3t

Situation Wanted—By all around tinner at in and outside furnace and job work. Address C. A. Starck, 807 Dearborn Ave., Chicago, Ill. 14-3t

Position Wanted—By young married man as traveling salesman for line of stoves or hardware. Can furnish references and have had two years' experience in the retail hardware and stove business. Address T-10, care of THE AMERICAN ARTISAN, 355 Dearborn St., Chicago, Ill. 14-3t

Situation Wanted—By good, all 'round tinner who understands how to do all kinds of work that comes to a country shop. The job must be steady. Address T-4, care of THE AMERICAN ARTISAN, 355 Dearborn St., Chicago, Ill. 13-3t

SPECIAL NOTICES.

WANTED

10 good practical tinners and furnacemen at once. Steady work. Call Peck-Williamson Heating & Ventilating Company, 335 W. 5th Street, Cincinnati. Ohio. 15-1 t.

SALESMAN WANTED.

Wanted experienced stove salesman for well known line of ranges and heaters. State experience, territory and salary expected. We are looking for salesman who can deliver the goods. Position open Jan. 1st, 1910. All communications strictly confidential. Address W. 26, care THE AMERICAN ARTISAN, 355 Dearborn Street, Chicago, Ill. 1-ufn

A FIRST-CLASS SALESMAN WANTED.

A salesman who has had experience in that capacity with some stove manufacturing concern in the West and who would like to unite with an A No. 1 trade-mark house in the same line and represent it in Ohio and Indiana may correspond with John D. Green, Secretary New York State & Northern Pennsylvania Stove Manufacturers' Association, 808-B Madison Avenue, Albany, New York. 14—4t

SPECIAL NOTICES.

WANTED SALESMAN

with wholesale and retail trade established and experience, for Chicago and suburban trade only, on salaty or commission basis, to devote his whole time to the sale of an old established line of goods. References required. Address P. O. Box 620, Collingswood, Camden Co., New Jersey. 8-ufn

SITUATION WANTED

By an experienced furnace salesman for 1910. Familiar with the trade in Indiana, Illinois and Iowa. Eight years in these states. References given. Address Furnaces, care THE AMERICAN ARTISAN, 355 Dearborn Street, Chicago. 14—

WANTED
FOR 1910.

Several first class furnace and boiler salesmen. Established trade in territory. Only practical men in the heating line, who have had selling experience on the road, need apply. Address Practical, care THE AMERICAN ARTISAN, 355 Dearborn Street, Chicago. 15-ufn.

The LENOX HOTEL
BUFFALO

Modern High Grade Fireproof

OUR OWN RAPID ELECTRIC CARRIAGES EXCLUSIVELY FOR PATRONS, operate continuously every few minutes from Hotel through Business District and to all Depots for principal trains.

EUROPEAN PLAN
Rates $1.50 per day and upward.

GEORGE DUCHSCHERER, Prop.

BLACK SILK
PASTE AND LIQUID
ONE QUALITY
STOVE POLISH

Buy Through Your Jobber

Our **Air Drying Iron Enamel** has no equal for use on grates, fenders, stove pipes, registers, etc. Ask your Jobber.

Black Silk Stove Polish Works, Sterling, Illinois

LIGHTNING RODS

If you desire your buildings rodded by a Competent, Reliable Agent, send us your address and we will send you the right party to do your work.

Do it now before it is too late

We sell the kind approved by the Mutual Fire Insurance Companies and the State Fire Marshals throughout the country.

Address E. A. FOY & CO.
405-411 East 8th Street CINCINNATI, OHIO

YOU

Need a Tinner, Furnace Man or Hardware Clerk? A want ad in

THE AMERICAN ARTISAN

That's all that's necessary to solve the problem.

BOOKS BY MAIL

In these progressive times no one can afford to underestimate the importance of good industrial books. The following are some of the most useful books in our catalogue:

Tin, Sheet-Iron and Copper Plate Work, by L. J. Blinn. Price	$2.50
The Cornice Work Manual, THE AMERICAN ARTISAN. Price	3.50
Manual of Receipts, THE AMERICAN ARTISAN. Price	3.50
Tinners' Helper and Pattern Book, by H. K. Vosburgh. Price	1.00
Sheet Metal Workers' Guide, by W. J. E. Crane. Price	.60
Hot Water Manual, THE AMERICAN ARTISAN. Price	3.50
Steam and Hot Water Fitters' Text Book, by Thos. E. McNeil. Price	1.00
Furnace Heating, by Wm. G. Snow. Price	1.75
Hot Water Heating, Steam and Gas Fitting; Acetylene Gas—How Generated and How Used, by Jas. J. Lawler. Price	2.00
Heating by Steam and Water, by Chas. B. Thompson. Price	3.00
Practical Hints on Joint Wiping. Price	.25
Lawlers' American Sanitary Plumbing, by Jas. J. Lawler. Price	2.00
Modern Plumbing, Steam and Hot Water Heating, by Jas. J. Lawler. Price	4.00
Manual of Business, THE AMERICAN ARTISAN. Price	3.50
THE AMERICAN ARTISAN Advertising Manual. Price	3.50

Address all orders and inquiries to

DANIEL STERN
Publisher and Bookseller
355 Dearborn St., CHICAGO, ILL.

The expense and annoyance of painting will not recur every year or two if you use

DIXON'S SILICA-GRAPHITE PAINT

the "Proven Shield for Steel Work." Durability records in all climates; write for a few

JOSEPH DIXON CRUCIBLE CO., Jersey City, N. J.

PEERLESS ENAMEL

ASK YOUR JOBBER

GLOSS BLACK FOR STOVE PIPES AND ALL IRON WORK

ALUMINUM FOR RADIATORS PIPES, ETC.

WRITE FOR SAMPLE

NICKEL PLATE STOVE POLISH CO., MFRS.
CHICAGO

Sperry's
Steam Kettles

Made from very thick metal, without Stay Bolts, joint packed in such a manner as to never need repacking. A little higher priced than some, but they are safe and tight.

D. R. Sperry & Co., Hollow-ware Founders Batavia, Ill.

Stove Repairs

AND STOVE DEALERS' SUPPLIES
From "BRAUER'S"

Prices are Lowest Treatment is best
Shipments are Promptest

A. G. Brauer Supply Co.
316-318 N. THIRD ST. ST. LOUIS, MO.

REPAIRS

TO FIT ALL STOVES AND FURNACES
PROMPT SHIPMENTS ASK FOR ORDER BLANKS
U. S. STOVE REPAIR COMPANY
13-15 South Third St., Minneapolis, Minn.

PATTERNS

For Stoves and Heaters
First-Class in Wood and Iron
Vedder Pattern Works, Troy, N.Y.
Established 1855

THE Geo. W. Cope STOVE PATTERN WORKS Cor. Brush and Woodbridge Streets
DETROIT MICHIGAN

Are you looking for a chance to go into business for yourself?

I know of places in every state where retail stores are needed—and I also know something about a retail line that will pay handsome profits on a comparatively small investment—a line in which the possibilities of growth into a large general store are great. An exceptional chance to get started in a paying business, and in a thriving town. No charge for my services. Write today for particulars and booklet telling how others have succeeded in this line and how you can succeed with small capital. EDWARD B. MOON, 13 West Randolph Street. Chicago.

NORTHWESTERN STOVE REPAIR COMPANY
654 to 666 W. 12th St.
CHICAGO, ILL.
LARGEST STOCK OF
STOVE AND FURNACE REPAIRS
In he World
Orders Filled Immediately.
Our new No. 25 Catalog will be sent with first order.

FORSHAW
OF ST. LOUIS
Repairs for Any Old Stove
Furnace Repairs
Range Repairs
Gas Stove Repairs
Stove Rods
Stove Mica
Stove Cement
Roofing Cement
Stove Polish
111 N. 12th St., St. Louis

Enterprise Pattern Works
Stoves PATTERNS Heaters
82 Clinton Street
DETROIT, MICH

QUINCY PATTERN CO
IRON & WOOD
STOVE PATTERNS
QUINCY, ILL.

PATTERNS
For Stoves and Heaters
The Cleveland Castings Pattern Co.
CLEVELAND, OHIO

WELLER PATTERN CO
DESIGNS and ESTIMATES FURNISHED FOR ALL KINDS OF STOVE PATTERNS
QUINCY, ILL.

Solve the Terne Plate Question

By Using

BERGER'S Hand Made Roofing Ternes

Topnotcher——and——Tuscora

(40 lbs. Coating) (25 lbs. Coating)

Quality work is the kind that builds business for you, Mr. Tinner and Roofer. Then get away from the "skimpy" kind of material and hook up with these high quality Ternes. They're the kind that warm the heart of the Tinner and Roofer who knows good Ternes when he sees them. Strictly hand made. Base—Extra Soft Open Hearth, coated with a mixture rich in Pure Tin. Palm Oil Flux and Finish. Plates perfectly resquared. Weight of coating stamped on every sheet.

Get posted about them. Send for samples and prices—right NOW!

Get particulars of our complete line of Ternes; also Bright Charcoals and Cokes (including furnace pipe sizes)

THE BERGER MFG. CO., CANTON, OHIO

New York Philadelphia Boston Chicago Atlanta Minneapolis St. Louis San Francisco

"MERCHANT'S OLD METHOD"

"Reg. in U. S. Pat. Off."

¶ We make the coating stick on our

HIGH GRADE ROOFING PLATES

without using acid as a flux.

¶ Every sheet is coated by our

SPECIAL PURE PALM OIL PROCESS

not a particle of acid being used in making the coating stick to the black sheet.

¶ "MERCHANT'S OLD METHOD" is the brand accepted by the United States government and leading architects and is THE BEST TERNE PLATE THAT CAN BE PRODUCED.

¶ The base is of the finest and softest open hearth and will stand the most severe tests.

¶ Every sheet is EXTRA HEAVY COATED with exact uniformity on both sides.

¶ Our High Grade Roofing Plates represent Honesty, Economy and Satisfaction.

We would be pleased to send "ROOFING RULES". A hand book on sheet metals in building construction upon request.—*Write us.*

MERCHANT & EVANS COMPANY

SUCCESSORS TO MERCHANT & CO. INC.

PHILADELPHIA, PA.

NEW YORK BALTIMORE CHICAGO KANSAS CITY BROOKLYN DENVER

Wheeling Corrugating Company

The busy Roofing Season is a harvest for Tinners, Cornice Makers, Hardware Dealers and all others who use or handle Galvanized and Black Sheets.

The Busy Season is rapidly approaching and interested parties want honest goods at honest prices.

TRADE-MAKING and TRADE-HOLDING Products:

Galvanized Sheets, Flat and Corrugated, Black Sheets.
Metal Roofings, All Kinds—Metal Sidings.
Beaded Sheets—Metal Lath—Metal Shingles.
Roof Fittings—Full Stock—All Kinds—Roof Trimmings.
Old Style Roofing Plates, Common Terne Plates, Tin Rolls.
Solder, Roofing Cement, Ventilators.

The above are just a few articles manufactured by the

Wheeling Corrugating Company

Wheeling, W. Va.

Write us and see what a postal card will do for you.

BRANCH OFFICES AND WAREHOUSES:

Chicago St. Louis Chattanooga New York Boston Philadelphia

GRIFFITHS GENUINE CHARCOAL IRON ROOFING PLATES
GRIFFITHS GENUINE GALVANIZED SHEETS

KNOBBLING FIRE

The same base material that was made thirty years ago. Nothing but Charcoal Iron rolled into Tin Plate and Sheet Iron at the

GRIFFITHS CHARCOAL IRON MILLS

Knobbling fires, hammers, bar mill and finishing mills at

WASHINGTON, PA.

One Piece of Metal. Require No Solder
Save Labor and Expense in Erecting.

Dieckmann's Conductor Elbows

Guarantee *F. Dieckmann* **Stamped in the Metal.**

Galvanized Steel, Charcoal Iron, Copper, Ingot Iron, Toncan Metal, Terne, Brass, Zinc.

THE FERDINAND DIECKMANN CO.

STATION B, CINCINNATI, OHIO.

PATENTED

TONCAN METAL SHEETS

Eaves Trough and Conductor Pipe

One of the important uses which have developed for **TONCAN METAL** has been for the manufacture of Eaves Trough and Conductor Pipe—a line for which its great durability under exposed service makes it especially adapted. Trough and Pipe manufacturers are waking up to the desirability of **TONCAN METAL** products, and **TONCAN METAL** Trough and Pipe, Elbows, Shoes, etc. can be procured from both Manufacturers and Jobbers of these formed products.

Every sheet of **TONCAN METAL** is stencilled with the trade mark. In addition, the plan has been adopted of attaching to each piece of **TONCAN METAL** Trough and Pipe a brass tag bearing the trade mark, thus making it easy to identify, whether painted or unpainted.

If you have not had particulars of **TONCAN METAL** Rust-Resisting Sheets and Formed Products, get them NOW.

THE STARK ROLLING MILL COMPANY

Sole Manufacturers of TONCAN METAL Sheets **Canton, Ohio**

ROOFING SLATE

We operate our own quarries, manufacture and sell all grades of Slate, Roofers' Supplies, Tools, Cement, Nails, Felt.

Write for delivered prices.

THE AULD & CONGER CO.
999 Prospect Street
CLEVELAND, OHIO

Bishop's Quick Working Forms

for closing end of Eave Trough in corrugations, as shown herewith.

You can close an end much quicker, neater and cheaper than in any other way. When you cut a trough, you can put an end in both parts, thus making no waste.

The frost will not burst the end out. You can close old work from a ladder.

The form is made in five sizes, 2½, 4, 4½, 5 and 6. For sale by jobbers or tinning specialty houses.

BISHOP HARDWARE COMPANY,
Dowagiac, Michigan.

THE MOST PRACTICAL ROOF

is by all odds a tin roof—and if a tin roof, then it should be made of

MF

32 POUNDS COATING

ROOFING TIN

"The Terne which turns the elements"

While many roofings with their various claims of superiority have come and gone, a good terne plate is yet acknowledged the best and most practical roofing material obtainable—weatherproof, fireproof, neat in appearance, easily applied, light and most important of all—durable.

AMERICAN SHEET & TIN PLATE COMPANY

FRICK BUILDING, PITTSBURGH, PA.

Plecker's *Corrugated* Expanding *Conductors*

Have no Cross Seams. Made of Galvanized Iron in ten-foot lengths.

Will not burst when full of ice.

CLARK, QUIEN & MORSE, PEORIA, ILL.

"Invisible Joint" STEEL CEILINGS Send for Catalog

TITELOCK PAINTED TIN SHINGLES ARE SUPERIOR TO WOOD. GALVANIZED SHINGLES ARE SUPERIOR TO SLATE. COPPER SHINGLES ARE SUPERIOR TO TILE.
MILWAUKEE CORRUGATING CO.
MILWAUKEE, WIS. KANSAS CITY, MO.

EAVES TROUGH, CONDUCTOR PIPE, ELBOWS, RIDGE ROLL, SHEET METAL ROOFING and SIDING Send for Price List.

No 27 DICKEY PLANISHED SHEET STEEL
MANUFACTURED BY WARD-DICKEY STEEL CO
INDIANA HARBOR IND
290 33 257
THIS SIDE UP

Insist upon
GENUINE
HAMMER PLANISHED SHEETS

"Planished Sheets"
means Hammer Finished sheets.
Do not accept Roll finished substitutes when ordering
"PLANISHED."
Insist upon the Genuine.

EXTRA SOFT INLAND OPEN HEARTH
INLAND STEEL CO.
CHICAGO

Blue
Annealed Sheets
Box Annealed Sheets
Galvanized Sheets
Corrugated Sheets
Roofing — all styles
Patent Leveled, Pickled and Electrical Sheets

ORDERS for CORNICE COPPER
STOCK SIZES SHIPPED
the day order is received
C. G. HUSSEY & CO. :: :: Pittsburgh, Pa.

A $5.00 Case of Fine Imported Drawing Instruments FREE
If You Enroll During the Months of Sept. or Oct.

ON THE SQUARE G. L. GRAY. N. Y. TRADE MARK

We make this offer in order that our largest enrollment may come in the early Fall, which gives the Fall and Winter evenings for Study.

G. L. Gray is the founder and general instructor of this School, and notwithstanding the general depression of the past two years, this School has been compelled to double its facilities for instruction work, which is due chiefly to the success and rapid advancement of our many scholars throughout the U. S. and Canada.

The cost of our full course is $35.00, not up one day and down the next, but the same the year round.

If you write now and enclose $7.00 P. O. or Express Money Order payable to G. L. Gray, the $5.00 case of drawing instruments and first month's drawings and instructions will be sent you prepaid by return mail or express the balance $28.00 to be paid $2.00 monthly. This offer will not stand after Oct. 31st. **Enroll in a School that has a reputation for practical up-to-date work.** Write for full information and sample drawings.

Gray's School of Pattern Drafting
1028 Jackson Ave., New York

THE AMERICAN ARTISAN Want Ads fill your wants.

SCHOEDINGER'S METAL CEILINGS

"Invincible Lock Joint" REGISTERED—U.S. PAT. OFFICE

MEAN SATISFACTION TO ALL CONCERNED:

A saving of labor and furring strips to those erecting; and a more secure and better ceiling to the owner.

No extra work and no joints to come apart. Invincible, i. e., not to be compared with. Superior, no equal anywhere. Prices right. Designs the most modern.

We offer every assistance in securing orders, also furnish blue prints "Free of Charge," showing how to erect.

Write for our proposition to Sheet Metal Workers.

F. O. SCHOEDINGER
146 North Third Street 148
COLUMBUS, OHIO

The Pugh Building, Cincinnati, Ohio, Dittoe & Wisenall Architects. Equipped with Mullins Metal Fire Proof Windows.

Insurance Reducing Windows

The picture shows one of the largest manufacturing buildings in the Queen City of the West. The remarkable feature of this building is its windows, made of durable metal with wire glass. With this equipment, insurance premiums are cut down. This saving alone in a few years would pay for the windows themselves; besides there is actual fire protection where Mullins' Windows are used.

MULLINS' Fire Proof—Storm Proof—Dust Proof WINDOWS

are made with the idea of turning fire. They are entirely of metal, lock-seamed throughout with no soldered joints in frame, sill or sash. Heat does not affect them in any way, and a Mullins' was never known to warp, buckle, contract or expand. Mullins are famous for durability and will outwear any other feature of the building.

Mullins Fireproof Windows are manufactured under supervision of **Underwriters' Laboratories, Inc.,** according to the latest specifications of the **National Board of Fire Underwriters** and **every window is inspected, approved and labeled** with their **official label.**

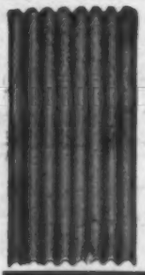
We have catalogues showing our various lines of product. Please specify the particular class of sheet metal work you are interested in and we will send you the proper catalogue for same.

W. H. Mullins Company
209 Franklin Street, SALEM, OHIO

The Improved One Piece Miter

This miter is made absolutely correct, true to shape, size and bead, and has the easiest connecting slip joint. Will save your time and temper. In case your supply house cannot furnish them, send your order direct to the

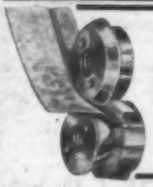
J. E. WHITACRE MFG. CO.
ROCKFORD, ILL.
Manufacturers of Sheet Metal Specialties.



Metal Roofing and Siding.
Corrugated Sheets, painted or galvanized.
Metal Window Frames and Sash Glazed with wired glass.
Skylights.
Skylight Gearing.

Price list and estimates furnished upon request.

Sykes Steel Roofing Co.
108-120 West 19th Place
CHICAGO, ILL.



Collar Edging Rolls

Deep bead. Positively guaranteed not to cut the metal. Very rapid. No experience required.

Send for circular.

C. DeWITT WAGNER,
Cedar Rapids, Iowa

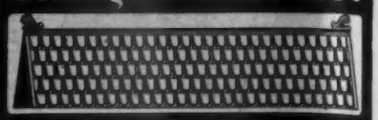
Makers of LOCK JOINT METAL SHINGLES. Will not only save money, but secure the best Metal Shingle on the market. Write for prices and get our samples.

ELLER MFG. CO. - - CANTON, OHIO

NEW YORK OFFICE AND WAREHOUSE, 29-31 Lexington Ave.

WALTERS'

Shingles that last



Made from Galvanized Tin and Painted Tin
Storm, Rust and Fire Proof

Do you want to increase your business? This is your opportunity. Write for catalogue, samples and prices.

National Sheet Metal Roofing Co.
JERSEY CITY, N. J.

CORNICES AND SKYLIGHTS

IN

COPPER OR GALVANIZED

The Canton Art Metal Co.

Canton, Ohio

AT LAST!!

A perfect Soldering Furnace, a time saver, a gasoline saver, a money saver. Don't be satisfied with any other than the

LUNDY
DOUBLE BLAST

the only soldering furnace on earth that forces both hot blasts from the outside to the center It is the one correctly constructed furnace. It is the one furnace that will heat irons faster than a tinner can cool them. It is the one furnace for the tinner to use and for the dealer to handle.

Let us send you complete descriptive matter today.

MEYER FOUNDRY & MANUF'G CO.
SOUTH BEND, IND.

RUBY FLUID

Soldering and Tinning Flux

It is anti-rusting, non-corrosive, non-poisonous and non-explosive, not affected by age, change of temperature, or exposure in open vessels. It is a perfect flux for GALVANIZED and ALL other metals. Shipped in tin cans, ready for use. On approval. Ask for booklet.

The Ruby Chemical Co., Johnstown, Ohio, U. S. A.

Chas. M. Hoover, Sales Mgr., 54 North Clark St., Chicago.

Ask Your Dealer For The

Sem

SOLDERING FURNACE

And You Will Make No Mistake

Always Ready—No Smoke—No Odor—No Noise—Unexcelled—Unequalled—Unrivaled—Safe—Sure—Durable.

Galvanized Iron, Brass or Copper Reservoir
Equipped with Cylindrical Slotted Burner

MADE ONLY BY
BURGESS SOLDERING FURNACE CO.
COLUMBUS OHIO, U. S. A.

MARVEL

Patent applied for.

PORTABLE PUNCH No. 20

Made entirely of STEEL

Punches ¼ in. hole in ⅜ in. and equivalent

Let us send you one on trial.

Write for circular and price of this and other Marvel Punches and Shears.

ARMSTRONG-BLUM MFG. CO.
106 N. Francisco Ave., Chicago. Ill.

Combination Pipe Fitter

A Complete Outfit for Working Sheet Metal Pipes.

Cuts Stove, Heater and Ladle Pipes at any angle. Wil also do the crimping. Write for Circulars and Prices.

BLUMER-DOSCHER MFG., CO.
408 Crescent St., Brooklyn, N. Y.

IT IS RIGHT

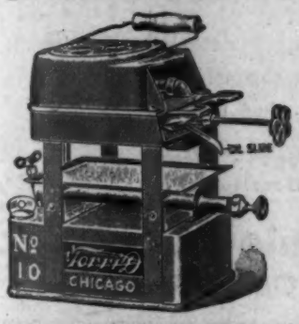
No. 31 Torch, $3.75 net.

There is no question about it. **The 31 Torch has no equal,** and is acknowledged to be the best plain quart torch ever made. **It is fitted with a powerful generator,** and uses but little gasoline. **In fact the saving of gasoline alone will soon pay for the torch.**

Jobbers will supply at factory price, or we will ship direct if cash accompanies your order.

Clayton & Lambert Mfg. Co.
Detroit, Mich., U. S. A.

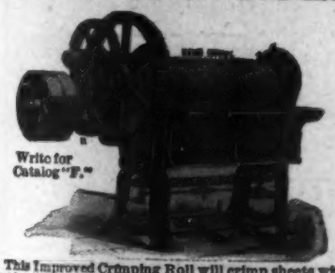
The "TORRID" Square Furnace



The most economical and hottest on the market. Noiseless, odorless and smokeless in operation. Our No. 10 has the greatest range in heating of any furnace made, namely 3 to 12 pound coppers, indoors or on a roof in cold and windy weather. Order of your jobber or we will ship direct for $6.50, on 30 days' approval.

GEO. W. DIENER MFG. CO.
77-83 West Lake Street, Chicago

CRIMPING ROLL



Write for Catalog "F."

This Improved Crimping Roll will crimp sheets without bucking them. We build a complete line of Shears, Punches and Bending Rolls, all sizes for hand or power drive. BERTSCH & CO., Cambridge City, Ind.

PUNCH, SHEAR & BENDER

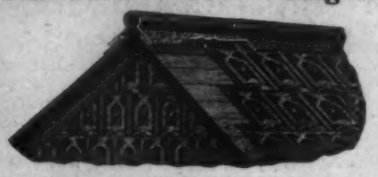
The Victor

Most practical for sheet metal workers, tinners plumbers, hardware stores, blacksmiths, carriage builders, etc.

Write for Bulletin No. 16.

NAPPANEE IRON WORKS, NAPPANEE, IND.

Standard Metal Shingles



Made with Metal and Glass Tops and with and without **Automatic** closing device.

THE CANTON MFG. CO.
CANTON, OHIO

Makers of Cornice, Skylights, Metal Ceilings, Eaves Trough, Conductor Pipe, etc.

THE CANTON VENTILATOR

FRIEDLEY-VOSHARDT CO.

MANUFACTURERS OF

Architectural Sheet Metal Ornaments, Statuary, etc.

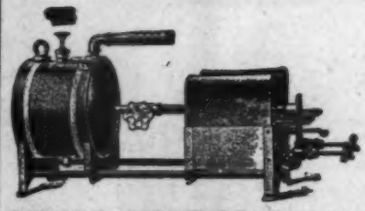
All Kinds of Stamped and Spun Work

Art Metal Ceilings and Side Walls

Send for Architectural Sheet Metal Catalog

No. 31.

761-771 Mather Street CHICAGO, ILL.



THE TINNER'S FRIEND
"QUICK MEAL"
SOLDERING FURNACE

QUICK, POWERFUL and DURABLE

Heavy Brass Tank with Brass Pressure Pump. Will Heat any size Soldering Iron. Suitable for bench or outside work. Special price made to tinners.

RINGEN STOVE CO., Div., Manufacturers ST. LOUIS, MO.

HAND PUNCHES, SKYLIGHT GEARING and CHAIN LIFTS

Punches ¾ in. hole in ⅛ in. iron.

Tinsmiths, Plumbers, Cornice Makers and Coppersmiths

TOOLS

Pipe Threading Machines || Second-Hand Goods Bought and Sold.

H. WEISS & COMPANY 20 Cliff St., NEW YORK

Tools for Sheet Metals

Double Cutting Shears.

INCLUDING

Tinners' and Roofers' Tools, Shears Punches Presses and Dies, Can-Making Machinery.

MADE BY

Niagara Machine & Tool Works, Buffalo, N. Y.

We Manufacture a Complete Line of STEEL CARPET SWEEPERS

Made entirely of cold rolled, drawn sheet steel it presents the handsomest finish ever shown in sweeper construction.
Bail of cold rolled steel rod is brazed into handle ferrule.
A steel screw fastened in wood handle with a pin locked ferrule prevents splitting of handle.

Case ends being made of steel allows sweeper to clean closer to wall than with old style construction.

Independent dumping dust pans, opening full, made of heavy tin.

Anti-clogging end cap, preventing hair, ravelings, etc., from coming in contact with working parts.

Anti-tipping device, doing away with tipping of sweeper when drawn back quickly. All working parts protected from dust.

Guaranteed to sweep when others fail.
Prices absolutely maintained.
No argument necessary. Sell on sight.

Write for Illustrated catalogue.

MANUFACTURED BY

The Streator Metal Stamping Company

STREATOR, ILL., U. S. A.

BRANCHES { San Francisco, 105 Front Street; New York, - 10 Warren Street; Chicago, - 1421 Michigan Avenue

Sterling and Streator Carpet Sweepers

Guarantee

The Streator Metal Stamping Co.
Streator, Ill.

Agreement With the Purchaser: *We agree, at any time, to make good by repair or replacement, any part or parts that show any defect in material or workmanship, provided that such defect is not caused by misuse or neglect on the part of the purchaser.*

The Streator Metal Stamping Co.,
(SEAL) *By P. C. Forrester, Pres.*

STANLEY
"ZIG ZAG" RULES

Made of Flexible Hard Wood. Concealed or Rivet Joints.
Yellow or White Enamel Finish.
The Highest Grade of Folding Rule Manufactured.

Send for Catalogue Containing Complete Description.

The Stanley Rule & Level Co.
New Britain, Conn., U. S. A.

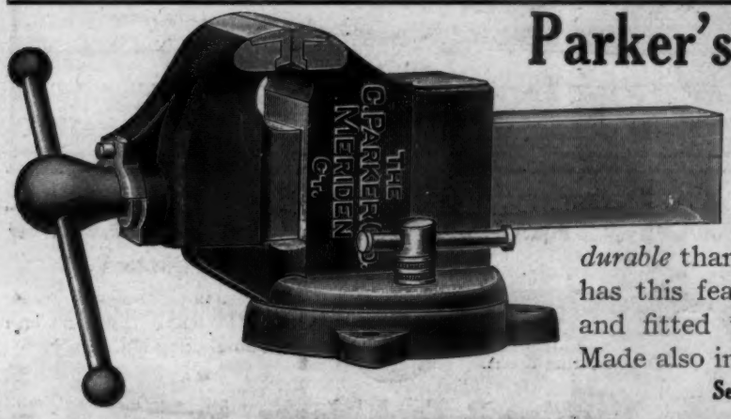
COPYRIGHTED, 1909, BY THE STANLEY RULE & LEVEL CO.

The Brand of Saw his Grandfather used in 1840 is still BEST to-day

It's time that tells in Saw Service. Buy a saw that you can hand down to your grandchildren with pride in its Sawing Qualites.
HUNDREDS OF DISSTON SAWS are in use today that were made long before the Civil War. Manufactured from our own special steel. Avoid the irritation of constant saw troubles.
FREE—The Disston Hand-Book on Saws—a mine of saw information.

HENRY DISSTON & SONS, Inc.
Keystone Saw, Tool, Steel and File Works
PHILADELPHIA, PENNSYLVANIA

Parker's Reinforced Slide Solid Jaw Swivel Vise



This Vise is made of Semi-Steel for Extra Heavy Work. It has a Reinforced Sliding Jaw which makes it *much stronger* and *more durable* than other vises. No other vise made has this feature. The Steel Faces are milled and fitted to the Jaws and are Renewable. Made also in Stationary style.

Send for Special Vise Catalog No. 5

The Charles Parker Co., Meriden Conn., and 32 Warren St., New York

LUFKIN Measuring Tapes

are made in every conceivable variety, to suit every purse and purpose, but all of the same superior quality.

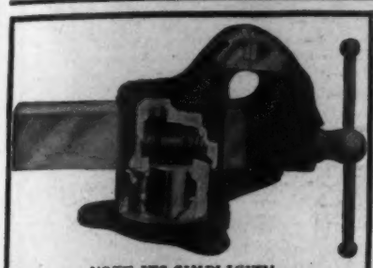
¶ Our extensive advertising creates a demand, that every progressive dealer should be able to satisfy.

¶ It takes but a minute and a postal to ask for our catalog—it's more than worth while.

Please Mention THE AMERICAN ARTISAN

THE LUFKIN RULE CO. SAGINAW, MICH, U. S. A.

New York London, Eng. Windsor, Ont.



NOTE ITS SIMPLICITY

Automatic Swivel Vise

Locks Automatically by Tightening the Jaws

Saves 20 per cent Vise Labor

SEND FOR CATALOGUE

ROCK ISLAND TOOL CO. ROCK ISLAND ILLINOIS, U.S.A.

136 Liberty St. NEW YORK

116 Lake St. CHICAGO

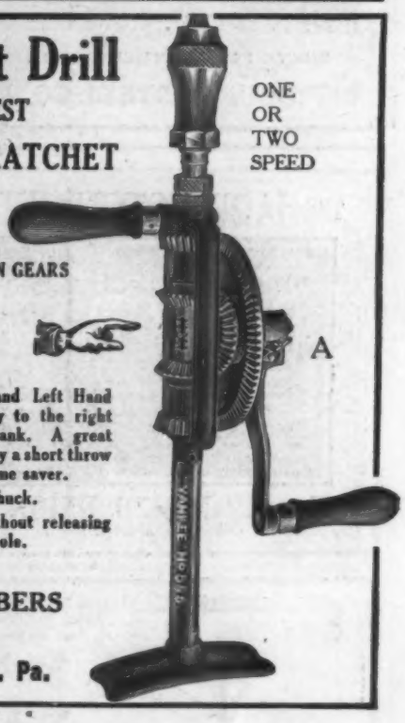
DENVER, 206 McPhee Building

"YANKEE" Breast Drill

The LATEST and GREATEST

AUTOMATIC DOUBLE RATCHET

Adjustable Ball Bearings



ONE OR TWO SPEED

A

NOTICE THE LITTLE SHIFTER BETWEEN GEARS

NOTCH 1—Gives you a plain drill.

NOTCH 2—A Left Hand Ratchet for removing taps, etc.

NOTCH 3—A Right Hand Ratchet.

NOTCH 4—An Automatic, Alternating Right and Left Hand Ratchet, the bit turning continually to the right regardless of the motion of the crank. A great advantage at close quarters where only a short throw of crank can be obtained. A true time saver.

NOTCH 5—Locks drill for opening and closing chuck.

LEVER A—Change of speed with forefinger, without releasing hold on crank or removing bit from hole.

SOLD BY LEADING JOBBERS

WRITE FOR FULL DESCRIPTION

North Bros. Mfg. Co., Philadelphia, Pa.

"Mephisto"

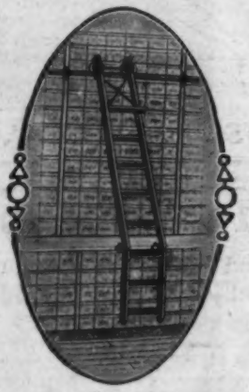
The bit with a razor edge

Guaranteed to bore in the HARDEST woods with ease under any conditions with or against the grain and WILL NOT CLOG.

Your Jobber or

SMITH & HEMENWAY CO.,

108 Duane St., NEW YORK CITY



The Milbradt Ladders

ALWAYS PROVE HIGHLY SATISFACTORY

because they are made of the very best material that can be obtained, finished up in first-class style, and as there is nothing about them to give or wear out, or get out of order, will last indefinitely.

Write for our Illustrated Catalogue.

MILBRADT MFG. COMPANY

1440 N. 8th St., ST LOUIS, MO.

The Highest Grade File Made.

DELTA FILES

DELTA FILE WORKS

CARVER FILE CO.

PHILADELPHIA, PA.

TRADE MARK DELTA

An independent organization not connected with the trust in any form, shape or manner.

FILES OF QUALITY

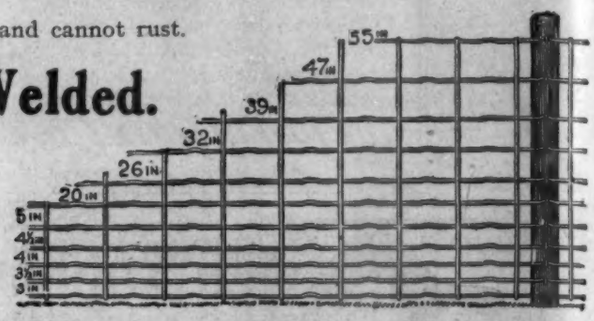
The File You Will Eventually Use.

"Pittsburgh Perfect" Fence is Better

It is the strongest and most satisfactory on the market.

It has no wraps or clamps to hold moisture and cannot rust.

It is Electrically Welded.



It will curb the strongest beast.

It can be adjusted to uneven ground.

It has more selling points than any other fence.

WRITE FOR FURTHER DESCRIPTIVE MATTER.

PITTSBURGH STEEL CO., Pittsburgh, Pa.

THE HARRINGTON AND KING PERFORATING CO.

PERFORATED METALS

OF EVERY DESCRIPTION AND FOR ALL PURPOSES

FOR SCREENS OF ALL KINDS

No. 612 NORTH UNION STREET, CHICAGO, ILL.
New York Office, 114 Liberty Street.

EASIEST to place.
LIGHTEST in weight.
NEATEST in appearance.

Strong and **Durable**

THE SYRACUSE STEEL SINK BRACKET

Plain, galvanized and nickel. People who know say this is the best sink Bracket made.

Prices and descriptive matter upon application. A postal will do.

Mfd. by **H. E. HESSLER CO., 502 N. Salina St., Syracuse, N. Y.**

Valves and Plungers

Only the very best leather and rubber are used in these goods and all are carefully and evenly fitted making them the best of their kind.

Berger Bros. Co.
Warerooms and Factory:
100 to 114 BREAD STREET
Philadelphia

100 Tinners' Patterns

Complete for **$1.00**

Sent Postpaid on Receipt of Price.

DANIEL STERN, 355 Dearborn Street, CHICAGO.

QUICKER YET WASHER

Built from Cypress and Steel, Steel Lever, Steel Connections, Ball Bearing, Galvanized Hoop, Gearing beneath tub out of the way. Nothing fastened to bottom of tub. Tub legs well braced. **Unexcelled rotating ball device.** Note the Neat and Attractive Appearance of the QUICKER YET. Easy Starting, Easy Stopping, Easy Running. No dead Center. No Rusty Clothes. Lid opens freely. No Disconnecting. No Heavy Machinery to lift on Lid. Made to wash as its name implies—Quicker Yet.

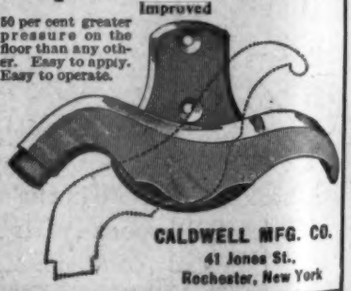
Exclusive sale to live Dealers. Write today, your Competitor may secure it tomorrow. Address

GLOBE MANUFACTURING CO.
Manufacturers of
QUICKER YET WASHERS
1519 4th Street - PERRY, IOWA

Empire Door Holder

Improved

50 per cent greater pressure on the floor than any other. Easy to apply. Easy to operate.



CALDWELL MFG. CO.
41 Jones St.,
Rochester, New York

STANDARD HORSE NAIL CO.
NEW BRIGHTON, PA., U.S.A.
MANUFACTURE
A Full Line of Horse Nails
Send for Catalogue, Prices & Samples.

"THE FLYER WASHER"

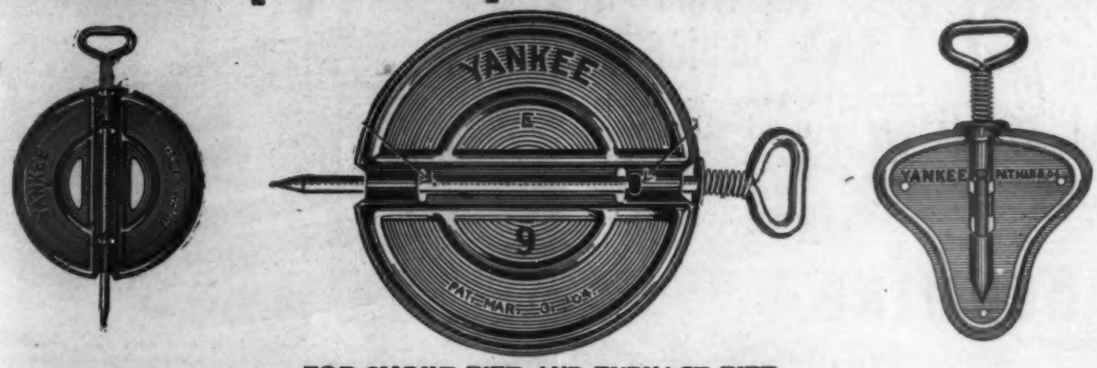
Like a magnet it draws the trade to you.

STRONG
DURABLE
EASY RUNNING
QUICK SELLING
GOOD PROFITS
MORE TRADE

Do you want the agency?

H. F. Brammer Mfg. Co., Davenport. Iowa

YANKEE [All Steel] DAMPERS and CLIPS



FOR SMOKE PIPE AND FURNACE PIPE

THE S. M. HOWES COMPANY. 40-46 Union St., BOSTON

- SHELVING -
WARREN SYSTEM
SELF PAYING
HARDWARE STORE EQUIPMENT
IN INTERCHANGEABLE SECTIONS
& SCREW, BOLT & GUN CASES.
J. D. WARREN MFG. CO. CHICAGO U.S.A.

Washing Machines
Are Staple—
They are good
Things to use
Which makes
Them good
To sell—
That is if
They are
Reliable
Machines.

The White Line
Of Washing
Machines are
Reliable—
Fully guaranteed—
Safe to buy—
And safe
To sell.
Do you
Handle
Them?

White Lily Mfg. Co.
1500 Rockingham Road, Davenport, Iowa.

Aim Sure

Will you be ready for "Sausage Days"?

Will you have in stock the two machines sausage makers consider indispensable?

Folks who know—and most folks do—will ask for and insist upon

Hit Hard

"ENTERPRISE"

Meat and Food Choppers

Sausage Stuffers, Lard and Fruit Presses

Mechanism simple—durable—and graceful. One chops the meat, leaving no lumps, no particles uncut. The other stuffs the sausage smoothly—without air bubbles.

Get ready now while there is time.

Aim Sure—Hit Hard

An attractive sign and a liberal supply of advertising matter will be sent upon request to every dealer.

The Enterprise Mfg. Co. of Pa.

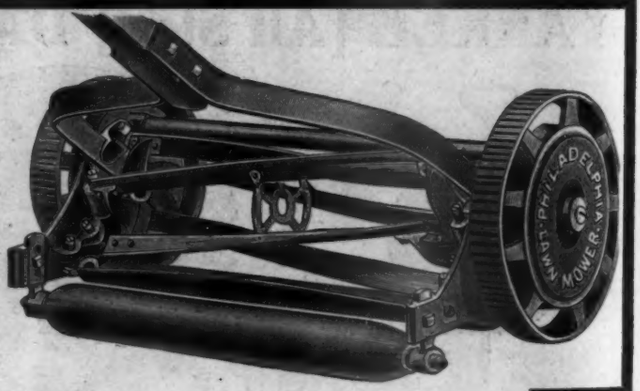
Philadelphia, U. S. A.

21 Murray St. New York 544 Van Ness Ave. San Francisco

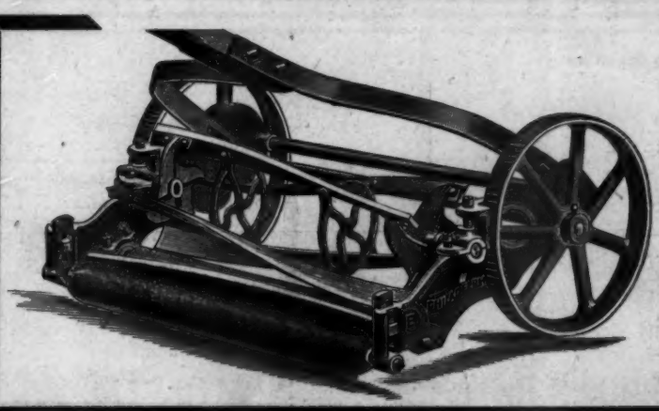
LARGEST MAKERS OF HIGH GRADE LAWN MOWERS IN THE WORLD

THE WORLD'S CHOICE

Throughout the United States, Mexico, and Canada, Europe, Asia, Australia and South Africa



GENUINE PHILADELPHIA



LAWN MOWERS

are in great demand because of their sturdy and easy running qualities—and the large line to choose from.

There is a big profit in Genuine Philadelphia Lawn Mowers and dealers would do well to consult us regarding our brand new proposition before placing orders for the coming season. **Write today.**

THE PHILADELPHIA LAWN MOWER CO.,

3101-3109 Chestnut St., PHILADELPHIA, Pa.

This Beautiful Window Trim

is attached right to the glass. It comes in a tube and in sections accompanied by full instructions for putting up. Ducks are cut out and pasted on the glass below the trim. Adjustable to windows 6x10 feet wide.

Sent free to any dealer who will use it a month.

THE UNION METALLIC CARTRIDGE CO., Bridgeport, Conn.

AGENCY, 315 Broadway, New York City.

DU PONT

EXPLOSIVES

BACKED BY THE GUARANTEE OF OVER 107 YEARS EXPERIENCE

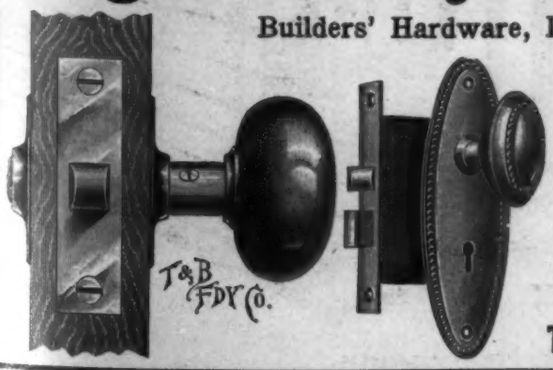
E. I. DU PONT DE NEMOURS POWDER CO.

WILMINGTON, DELAWARE

Light Gray Iron Castings

Builders' Hardware, Dampers and Damper Clips.

OIL AND GAS STOVES, FURNACE LAMPS, MOLASSES GATES, LETTER BOXES, HARDWARE SPECIALTIES.

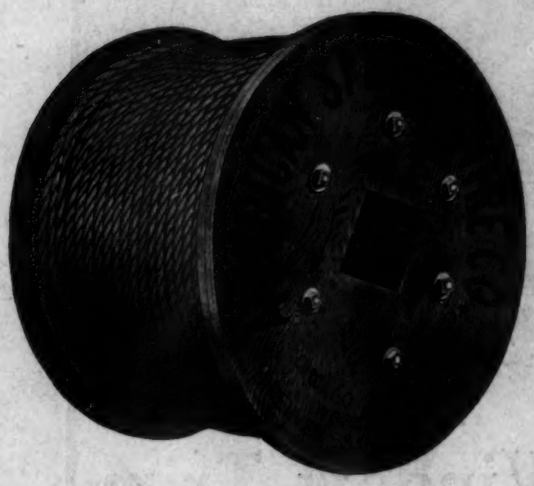


Write for our complete catalog.

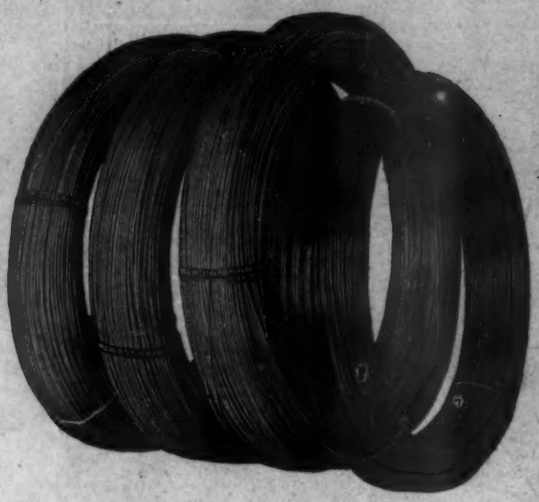
The Taylor & Boggis Fdry. Co., Cleveland, Ohio

American Steel & Wire Co.

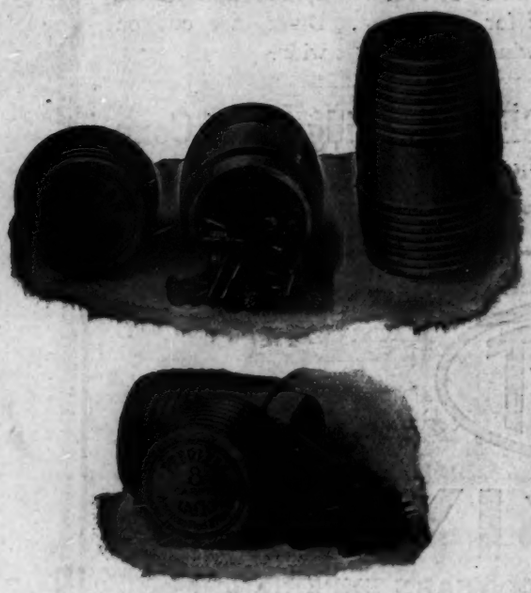
Chicago New York Denver San Francisco

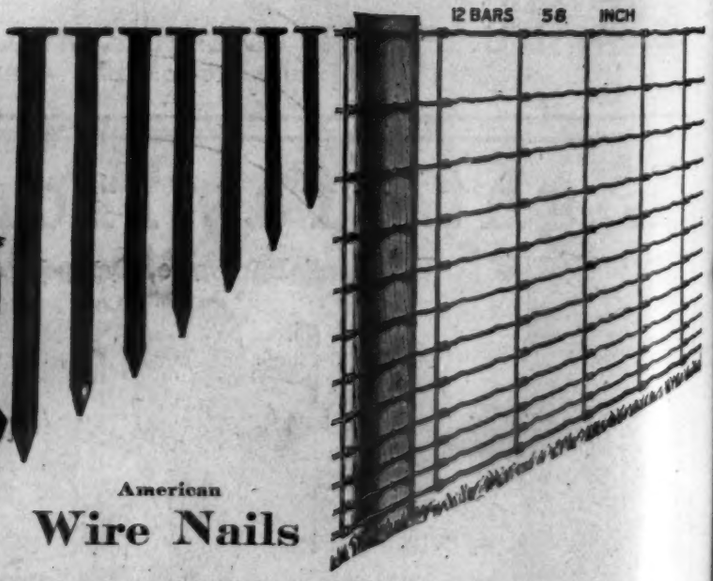


American Wire Rope



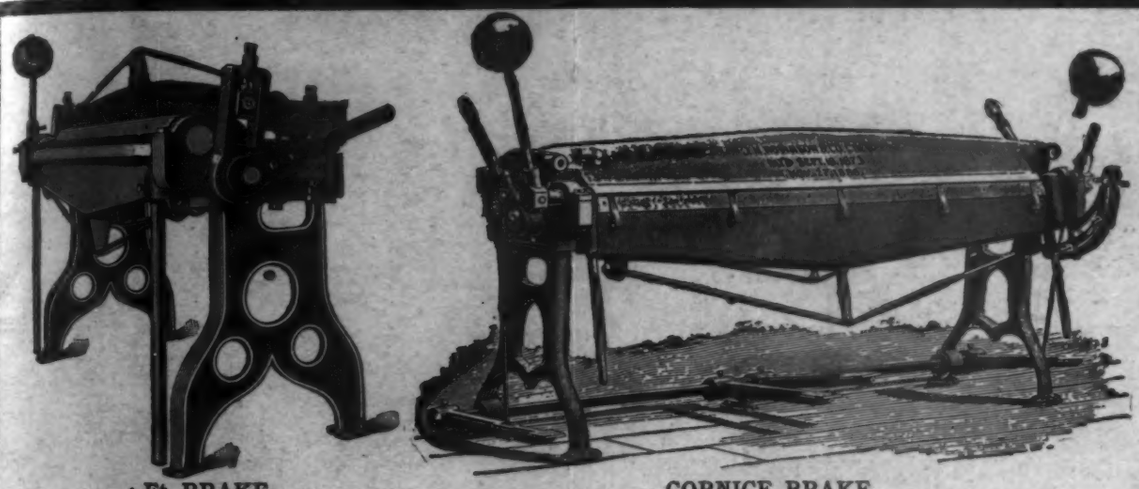
W. & M. Telephone Wire





American
Wire Nails

And Wire of Every Description.



4 Ft. BRAKE
Capacity, 12 Gauge.

CORNICE BRAKE
Capacity, 20 Gauge and Lighter.

THE J. M. ROBINSON MFG. CO.

Manufacturers of Sheet Metal Working Machinery

3282 to 3288 Spring Grove Avenue CINCINNATI, OHIO

THE AMERICAN ARTISAN ADVERTISING MANUAL

A NEW ONE, JUST OUT. The most complete and most valuable treatise upon the subject of advertising as it is applicable to the retail merchant ever published. :::: NO DEALER CAN AFFORD TO BE WITHOUT IT.

Price $3.50 Per Copy. For Sale by Your Bookseller or by

DANIEL STERN, Publisher, 355 Dearborn Street, Chicago, Ill.

LIGHT FOR HOMES, STORES, FACTORIES AND STREETS

The best light under the sun is produced by the STANDARD AND SIMPLICITY LIGHTING SYSTEMS. Better than electricity or city gas, cheaper than kerosene or candles, with none of their objections. No smoke—no soot—no odor—no work filling lamps or trimming wicks. A light that does not befoul the air. Suitable for the cottage or for the mansion, for the city or country home. Anyone can operate them and be entirely independent of gas and electric companies. Produces a Hydro-Carbon Light—white, brilliant and penetrating. Does not change or effect colors at night nor cause eye strain. Endorsed by insurance underwriters, recommended by users.

BIG MONEY FOR LIVE AGENTS

We want a live, wideawake hustler to represent us in every community. Exclusive territory given. A well organized "Sales System" aids the agent in his work. Write today for large illustrated catalogue and further particulars.

THE STANDARD-GILLETT LIGHT COMPANY, 10 West Michigan Street, Chicago

"STANDARD" HIGH POWER HAMMERLESS REPEATING RIFLES

AUTOMATIC and HAND-OPERATED

EASY TAKE DOWN

SIX SHOTS

THE RIFLE OF TODAY

Has so many points of superiority that you really can't afford to overlook them. Write us for information today. Be ready to supply the demand and to reap the large profits.

STANDARD ARMS CO., 133 F Street, Wilmington, Del., U. S. A.

OLD STYLE REGISTERED TRADE MARK N.&G.TAYLOR CO PHILADELPHIA

"Not a Cent for Repairs"

A roofer at Greenville, Pa., wrote us January 3, 1909:—

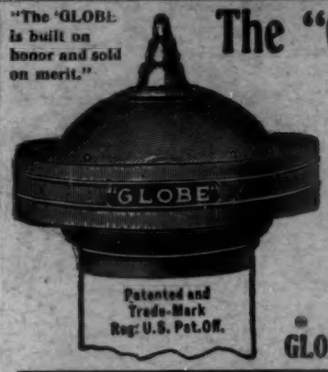
"TARGET AND ARROW" tin needs no recommendation in this locality, as my father used it before I was born—25 years ago. He roofed our House with it in 1888, and it has not cost a cent for repairs, outside of painting."

It is not necessary to offer your customers guarantees or promises when you advocate a tin that has so emphatically "made good" as the "TARGET AND ARROW" brand.

N. & G. TAYLOR COMPANY
The Old Philadelphia Tin Plate House
PHILADELPHIA

Established 1810 — One Hundredth Year

"The 'GLOBE' is built on honor and sold on merit."



The "GLOBE" Ventilator

in COPPER, GALVANIZED IRON and with Glass Tops for Skylight purposes

ABSOLUTELY STORM PROOF
For Perfectly Ventilating Schools, Churches, Halls, Mills, Factory and Audience Rooms of Every Character
SMOKY CHIMNEYS CURED

"GLOBE VENTILATED RIDGING"
Send for Pamphlet
MANUFACTURED BY
GLOBE VENTILATOR CO., Troy, N.Y.

A FAST SELLING ITEM

and one which leaves the dealer a good profit is our

BERLIN **KETTLE**

Made with tin or enameled cover.
Our line consists of over 500 fast selling items.

Like all our goods it is strictly first class and sells at a reasonable price.

WRITE FOR CATALOG.
Star ★ Enameling & Stamping Co., PITTSBURGH, PA.

Drink Pure Water

The **No. 50 Star Pump** shown here will positively purify the water in any well or cistern in a short time.

This purifying feature alone makes it the only pump fit to put in any well where the water is used for household purposes, for it will easily save its cost in the doctor's bill many times over.

As it is made of No. 24 gauge galvanized iron it is a very substantial and handsome outfit, and will last for years.

Our line of purifying pumps is very complete. So is our line of Galvanized Chain Pump Curbs and Tubing.

Ask your jobber for Star Pumps.

Star Bucket Pump Company
ST. LOUIS, MO.

NAILS THAT NEVER RUST

KEYSTONE BRAND GALVANIZED NAILS
CUT OR WIRE
Evenly Coated — Perfectly Separated
KEYSTONE NAIL CO., Pittsburgh, Pa.
Send for Catalogue and Prices.

---

100 Tinners' Patterns Complete for . . **$1.00** Sent postpaid on receipt of price. **DANIEL STERN**
355 Dearborn St., Chicago, Ill.

FOLLANSBEE BROS. CO.

THE ONLY MAKERS OF HAMMERED OPEN HEARTH ROOFING TIN IN AMERICA

New York — **PITTSBURGH** — Chicago
Louisville, Rochester, Milwaukee, Cleveland, Memphis, Norfolk, Indianapolis, Detroit, Columbus, Buffalo, Nashville
St. Louis, Stockhoff Supply Co. Kansas City, T. H. Prest Supply Co.

SHEET METAL WORKERS SUPPLIES
Complete List in "Follansbee" Catalogue.—*Ask for it.*

SCOTT'S EXTRA COATED

Made strictly in accordance with the Old Welsh Process, is the greatest value in

ROOFING TIN

The ECLIPSE Nested Stove Pipe Thimble

Saves 80 per cent of room.
Stronger than a hand-made riveted thimble.
Always Ready to hook together.
The Lug is always on top and passes through two slots then tied. Does not interfere with the entering stove pipe.

The ECLIPSE Nested Stove Pipe Thimble is made of Galvanized Iron in sizes of 5, 6 and 7 inch.

Manufacturers of Pieced Tinware and all Styles of Flour Sifters.
STUBER & KUCK, Peoria, Ill.

YALE
Russia finish, pat. Lock
STOVE PIPE
It is made of a very high grade of uniform color Blue Polished Steel and isonated to prevent rusting. Made in all sizes. Packed twenty-five and fifty joints to crate. For sale by the jobbing Hardware Trade throughout the United States. Mfg. by **HEMP & CO.** 2nd and Chouteau Avenue, ST. LOUIS.

In the event your jobber does not handle this pipe, send your inquiries to us.

The "CENTENNIAL"
RAIN-WATER-CUT-OFF

The strongest, most durable and cheapest CUT-OFF on the market.

The only single cut-off made to fit **Corrugated** and plain pipe and which can be used without extra pipe or elbows. For sale by all leading jobbers.

Manufactured only by
The Sullivan-Geiger Co.
19 & 21 E. South Street, Indianapolis, Ind.